

Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

ADF&G Bethel toll free: 1 (855) 933-2433

Meeting Agenda

Date: 07/12/2017

Time: 10:00 a.m.

Place: Bethel

Time Called to Order:

Chair: LaMont Albertson

ROLL CALL TO ESTABLISH QUORUM:

Upriver Elder:
Downriver Elder:
Commercial Fisher:
Lower River Subsistence:
Middle River Subsistence:
Upper River Subsistence:
Headwaters Subsistence:

QUORUM MET? Yes / No

Processor:
Member at Large:
Sport Fisher:
Western Interior RAC:
Y-K Delta RAC:
KRITFC:
ADF&G:

INTRODUCTIONS:

INVOCATION:

APPROVAL OF AGENDA: *the agenda may be amended at this time.*

APPROVAL OF MINUTES: *Optional. ADF&G does not prepare official meeting minutes.*

ADF&G MANAGEMENT ACTIONS UNDER CONSIDERATION:

PEOPLE TO BE HEARD:

CONTINUING BUSINESS:

- Subsistence Reports: Lowest River, ONC Inseason Subsistence Report, Lower River, Middle River, Upper River, Headwaters
- Overview of Kuskokwim River salmon run assessment/ discussion of ADF&G considerations:
 - a. Test Fisheries (Bethel and Aniak):
 - b. Sonar/Weirs/Mark-Recapture/Aerial Surveys/Other:
 - c. Subsistence Division Project Update:
- Commercial Catch Report: N/A
- Processor Report:
- Sport Fish Report:
- Intercept Fishery Report:
- Weather Forecast:
- Discussion of ADF&G Management considerations and discussion of possible alternatives (recommendations from the Working Group):
- Motion for Discussion and Action:

OLD BUSINESS:

NEW BUSINESS:

- Special Action Request– *Dave Cannon*

COMMENTS FROM WORKING GROUP MEMBERS:

NEXT MEETING DATE: _____ **Time:** _____ **Place:** _____

Informational Packet

Information Packets *ARE*:

- **Intended to help inform Working Group discussions.**
- **To be viewed and used in context with Working Group meetings only.**

Packets *ARE NOT*:

- **To be viewed as standalone documents.**
- **A final say on fisheries management decisions.**

Please use this information responsibly:

Packet information is an incomplete snapshot of an ongoing discussion and changing conditions. Packet information should not be reproduced for any purpose other than to describe Working Group meeting discussions.

Misuse of Packet information can contribute to misunderstandings that can **cause harm to salmon users** and potentially **damage salmon resources**.

Ask Questions: ADF&G staff will be happy to answer biology and management questions. Please call **1-855-933-2433** to reach ADF&G Kuskokwim Area staff.

Attend Meetings: Each Working Group meeting is announced at least 48 hours prior to time and date of meeting. In addition, each meeting is recorded. Recordings can be found here:
http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarea_kuskokwim.kswg

Viewing the information packet while listening to meetings/recordings will provide a better understanding of the information presented in this packet.

Thank you.
Jennifer Peeks
Aaron Tiernan
Working Group Coordinators

Informational Packet

Orutsararmiut Native Council Inseason Harvest Monitoring Weekly Report

Summary of Interview Activities

ONC has conducted weekly surveys of Bethel Area fish camps since 8 June. So far this season, we have surveyed 101 unique fish camps. From 1 July through 9 July, ONC interviewed 81 unique fish camps. Of these fish camps, 41 reported information on their catch and effort for their most recent fishing trips.

- 30 fish camps reported to have fished during the 7/1 opener
- 23 fish camps went out during the 7/3 opener
- 6 fish camps went fishing more recently, between 7 July through 9 July
- Drift gillnets were the most common gear type used (73%), followed by set gillnets (27%)
- Average soak time=1.7 hours

Of the fish camps surveyed, most fishing trips (79%) occurred between Napaskiak and Akiachak. The remaining trips were conducted between Napaskiak and the confluence with the Johnson River (18%) and downriver from the confluence with the Johnson River (3%). No survey respondents fished upriver from Akiachak.

Table 1. Average number of salmon harvested by surveyed fish camps since July 1

Species	Chinook Salmon	Chum Salmon	Sockeye Salmon
Average Number of Fish Harvested	1	19	19

Table 2. Average Catch-Per-Unit-Effort (CPUE) for the surveyed fish camps that fished since July 1

Species	Chinook Salmon	Chum Salmon	Sockeye Salmon
Average CPUE	2	47	37

Numbers represent the expected catch using a 150 foot net for one hour.

Informational Packet

Table3. Fishing Progress for 49 fish camps surveyed between 1 July and 9 July. Please note that not all fish camps have set harvest goals for salmon.

Salmon Species	Less Than Half	Halfway	More than Half	Met	Total N
Chinook salmon	58%	2%	5%	35%	48
Chum salmon	15%	4%	6%	75%	48
Sockeye salmon	22%	29%	20%	29%	49

Summary of Comments

This week, surveyors conducted fish camp surveys over the phone and at fish camp. The following summary of comments only includes comments from fish camps surveyed between 5 July and 9 July. Eleven fish camps are still attempting to meet their sockeye salmon goals with a plan to target coho salmon afterwards. Seven fish camps stated that gillnet fishing opportunities should be provided earlier. One fish camp claimed that the restrictions were good and allowed more Chinook salmon to get up the river. Three fish camps commented on bad weather causing their fish to spoil and go to waste. One fish camp reported to not target Chinook salmon. Three fish camps didn't harvest Chinook salmon because of their low abundance. One fish camp is waiting to fish more until berry season passes. Twenty-five fish camps reported to be done fishing until coho salmon fishing begins.

Informational Packet

Total Catch for Lower Kuskokwim River Tagging			
Date	Chinook	Sockeye	Chum
5/26/2017	1	0	0
5/27/2017	0	0	0
5/28/2017	1	0	0
5/29/2017	0	0	0
5/30/2017	0	0	0
5/31/2017	0	0	0
6/1/2017	1	0	0
6/2/2017	1	0	0
6/3/2017	1	0	0
6/4/2017	1	0	0
6/5/2017	7	0	0
6/6/2017	3	0	0
6/7/2017	13	0	1
6/8/2017	9	0	0
6/9/2017	4	0	0
6/10/2017	8	0	1
6/11/2017	9	0	1
6/12/2017	12	0	0
6/13/2017	5	0	0
6/14/2017	15	1	0
6/15/2017	9	0	0
6/16/2017	9	1	0
6/17/2017	16	1	0

Total Catch for Lower Kuskokwim River Tagging			
Date	Chinook	Sockeye	Chum
6/18/2017	20	0	3
6/19/2017	24	2	3
6/20/2017	28	0	8
6/21/2017	18	1	9
6/22/2017	24	4	10
6/23/2017	28	3	9
6/24/2017	14	3	16
6/25/2017	27	2	8
6/26/2017	15	2	13
6/27/2017	22	0	16
6/28/2017	15	1	10
6/29/2017	21	0	8
6/30/2017	10	1	5
7/1/2017	19	1	4
7/2/2017	17	1	20
7/3/2017	30	9	30
7/4/2017	16	8	48
7/5/2017	17	8	43
7/6/2017	4	4	4
7/7/2017	10	5	13
7/8/2017	7	6	20
7/9/2017	7	2	15
Totals	518	66	318

Note- All fish were caught using 7.5" drift gillnets.

Informational Packet

Kuskokwim River Salmon Assessment Update: 7/10/2017



This document presents the key assessment information considered by managers in-season. The production of this document is a collaborative effort between the ADF&G and USFWS. **All data and analyses contained are preliminary and are subject to change, so please make interpretations carefully.**

If you have any questions about the content, please contact Ben Staton (USFWS; benjamin_staton@fws.gov) or Zachary Liller (ADF&G; zachary.liller@alaska.gov).

Table of Contents (*Click to jump to section*):

- **Page 2:** Chinook Salmon Bethel Test Fishery Information
- **Page 3:** Chum Salmon Bethel Test Fishery Information
- **Page 4:** Sockeye Salmon Bethel Test Fishery Information
- **Page 5:** Species Composition Information
- **Page 6:** Sonar Cumulative Count Information
- **Page 7:** Chinook Salmon Appendix
- **Page 8:** Chum Salmon Appendix
- **Page 9:** Sockeye Salmon Appendix

Abbreviations:

- BTF: Bethel Test Fishery
- ATF: Aniak Test Fishery
- CPUE: Catch-per-unit-effort
- EOS: End-of-Season

To view escapement information, please visit the ADF&G Kuskokwim River Fish Counts page:

- <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

For the most up-to-date information regarding fishing opportunities please visit:

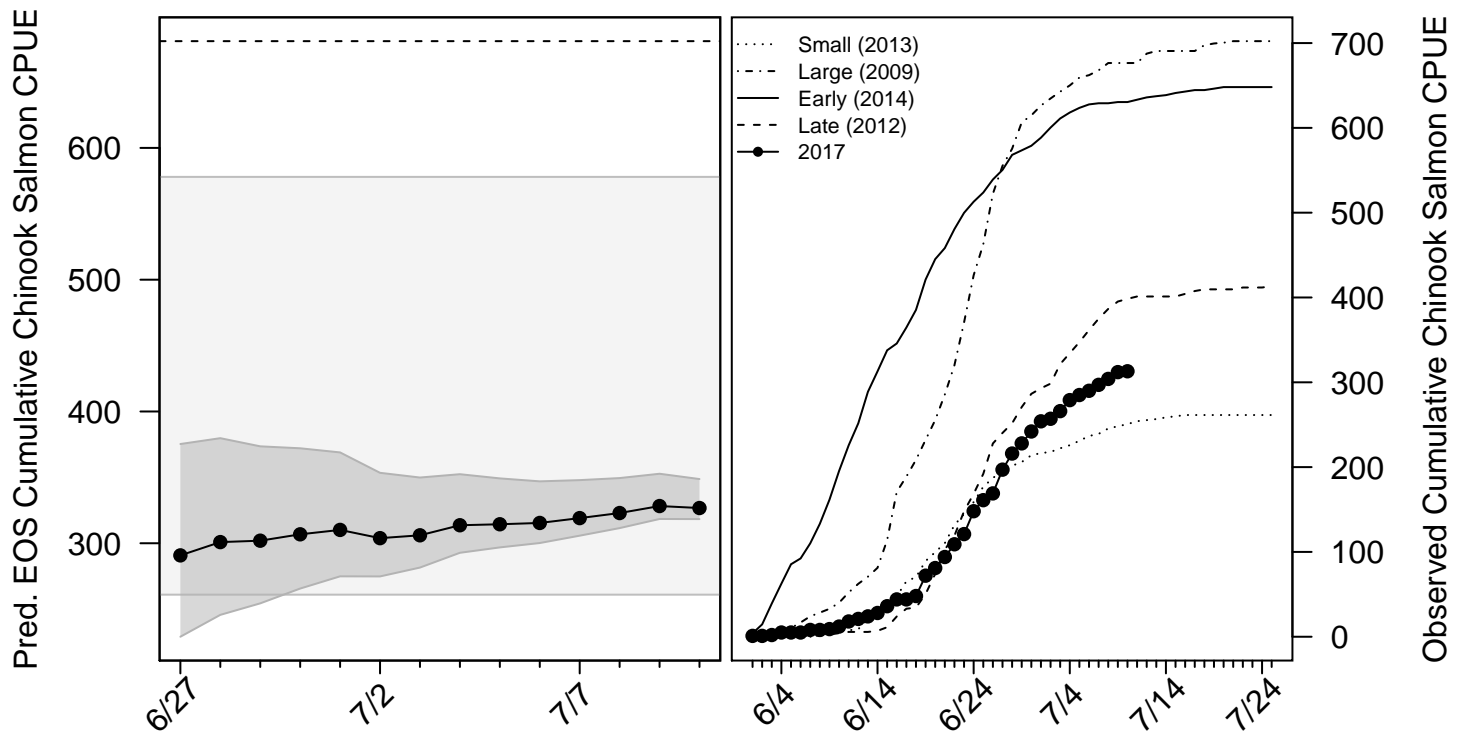
- http://www.adfg.alaska.gov/index.cfm?adfg=cfnews_mobile.main

Informational Packet

Chinook Salmon (7/10)

- The BTF daily CPUE was **1**.
- The BTF cumulative CPUE is **313**.
- **1** year since 2008 (**11%**) fell below this cumulative CPUE.
- **96%** of the run is complete based on historical average run timing.
- The Chinook salmon run timing appears to be later than average.
- **1 - 3%** of the run is expected to pass in the next 5 days.
- Over the last 3 days, Chinook salmon made up **1%** of the BTF catches, compared to **3%** on average.

Chinook Salmon Figure 1. *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (dark grey region) and historical median (circles) . The light grey region shows the range of EOS values from 2010 - 2013, which indexed run sizes past Bethel ranging from 66,000 to 102,000. The dashed horizontal line shows the EOS value from 2016. *Right:* The cumulative BTF CPUE from 2017 plotted along with four previous years intended to represent a range of early/late and small/large index values.



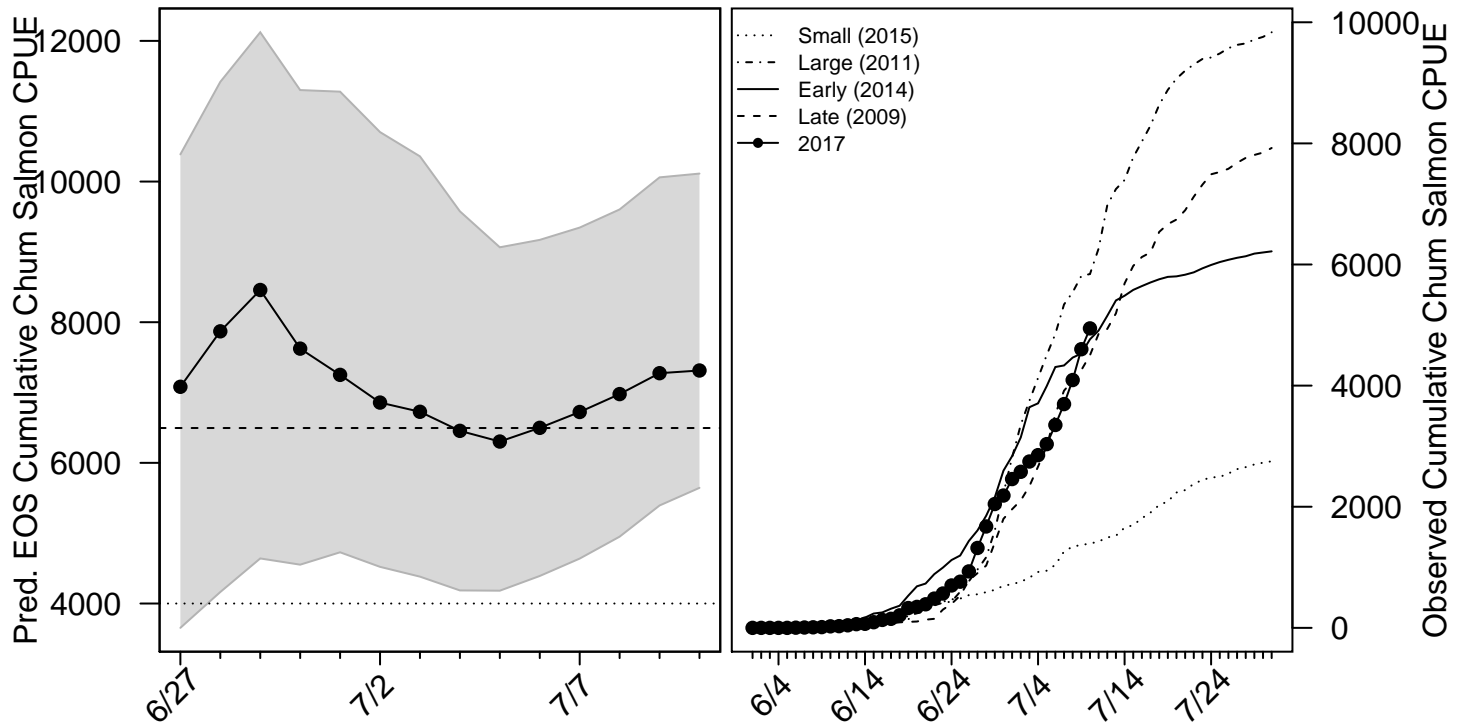
For more detailed information, see the Chinook salmon appendix at the end of this document.

Informational Packet

Chum Salmon (7/10)

- The BTF daily CPUE was **344**.
- The BTF cumulative CPUE is **4,945**.
- **8** years since 2008 (**89%**) fell below this cumulative CPUE.
- **68%** of the run is complete based on historical average run timing.
- No run timing forecast is available for chum salmon.
- **9 - 17%** of the run is expected to pass in the next 5 days.
- Over the last 3 days, chum salmon made up **73%** of the BTF catches, compared to **75%** on average.

Chum Figure 1. *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (grey region) and historical median (circles). The dotted horizontal line shows the EOS value above which the escapement goal at Kogrukluuk has always been met historically. The dashed horizontal line shows the average since 2008. *Right:* The cumulative BTF CPUE from 2017 plotted along with four years intended to represent a range of early/late and small/large index values.



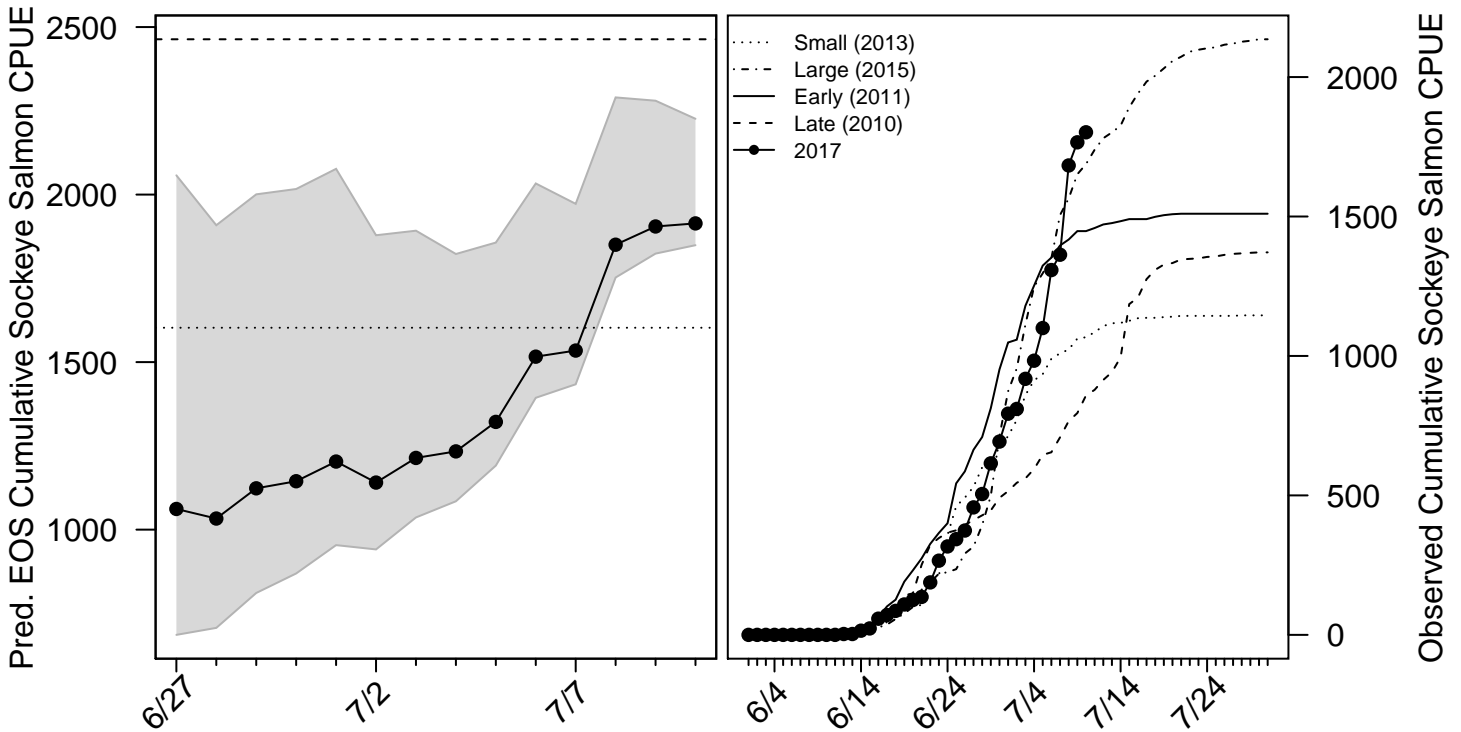
For more detailed information, see the chum salmon appendix at the end of this document.

Informational Packet

Sockeye Salmon (7/10)

- The BTF daily CPUE was **36**.
- The BTF cumulative CPUE is **1,802**.
- **9** years since 2008 (**100%**) fell below this cumulative CPUE.
- **94%** of the run is complete based on historical average run timing.
- No run timing forecast is available for sockeye salmon.
- **3 - 6%** of the run is expected to pass in the next 5 days.
- Over the last 3 days, sockeye salmon made up **26%** of the BTF catches, compared to **22%** on average.

Sockeye Figure 1. *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (grey region) and the historical median. The dashed horizontal line shows the EOS value from 2016 and the dotted horizontal line shows the average since 2008. *Right:* The cumulative BTF CPUE from 2017 plotted along with four years intended to represent a range of early/late and small/large index values.

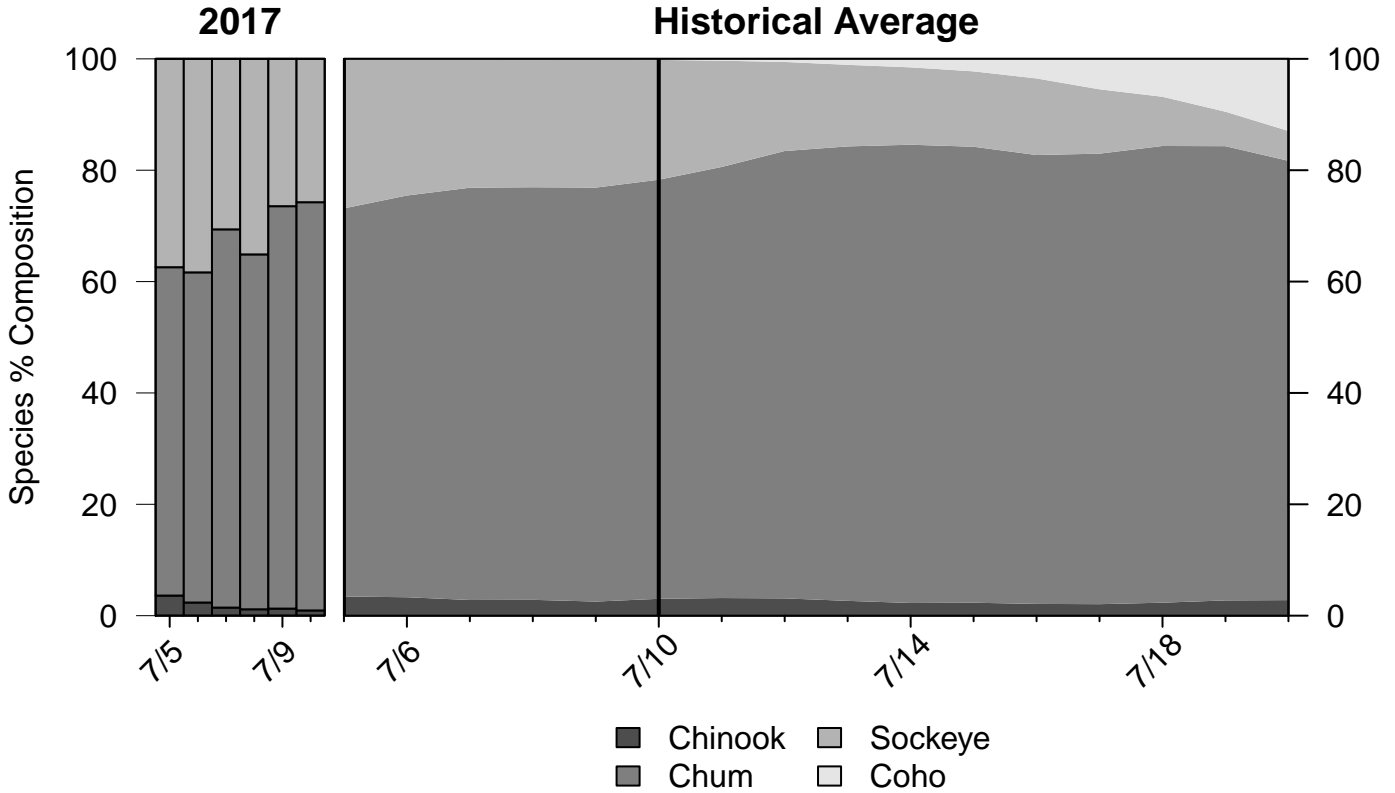


For more detailed information, see the sockeye salmon appendix at the end of this document.

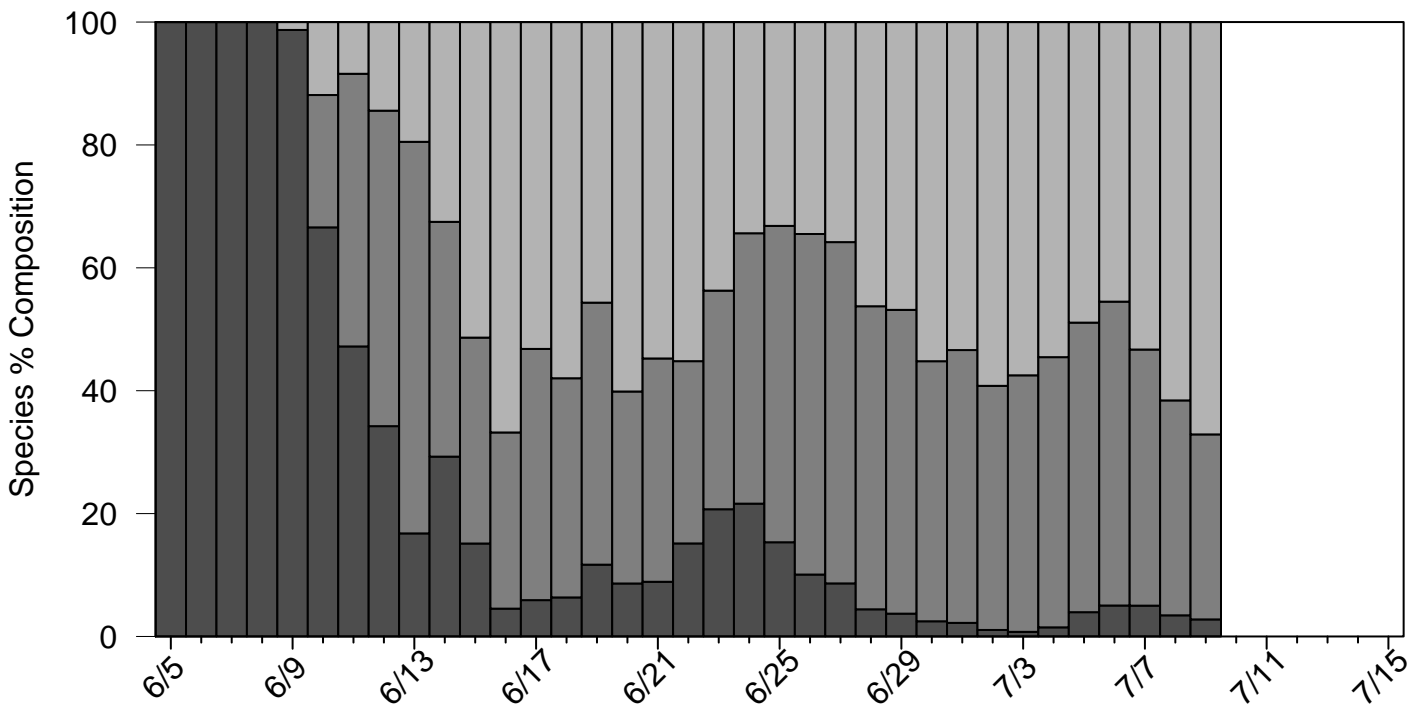
Informational Packet

Species Composition

Species Composition Figure 1. Species percent composition in the BTF from 2017 and based on historical average. The composition presented on each day represents the average composition over the past 3 days.



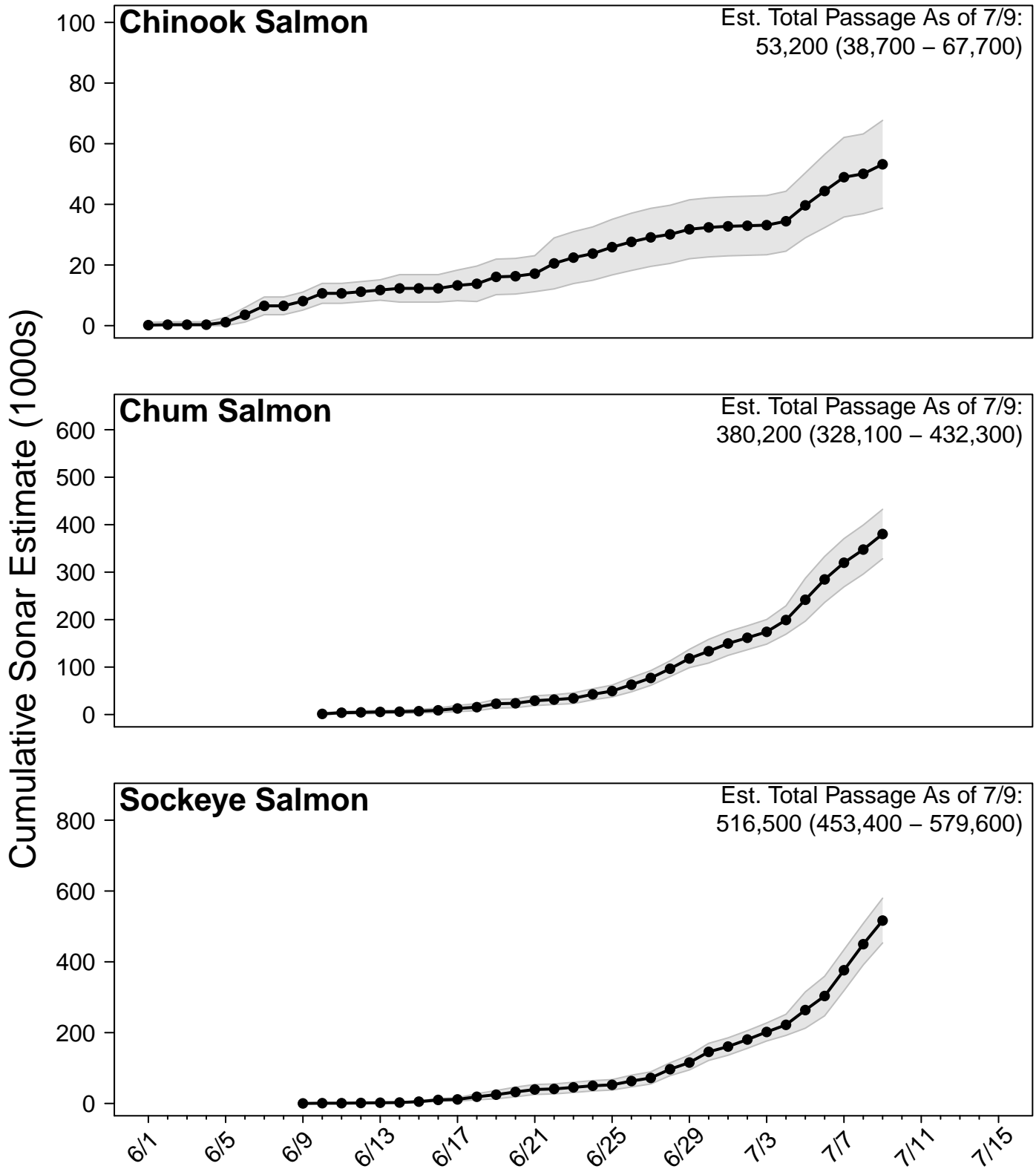
Species Composition Figure 2. Species percent composition from the sonar estimates from 2017 (salmon species only, excluding pinks). The composition presented on each day represents the average composition over the past 3 days.



Informational Packet

Sonar

Sonar Figure 1. Cumulative estimates of salmon passage from the 2017 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day. The sonar project began partial operations on June 1 and full operations on June 3.



Informational Packet

Chinook Salmon Appendix

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
7/7	297	596	513	629	239	486	517
7/8	304	601	518	629	246	492	522
7/9	312	610	523	630	248	493	526
7/10	313	624	527	630	251	496	530
7/11		634	535	633	254	470	502
7/12		637	537	636	255	476	509
7/13		643	543	637	257	481	514
EOS		687	625	650	261	528	557

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
7/7	5,766	2,522	2,681
7/8	5,908	2,556	2,705
7/9	6,143	2,575	2,761
7/10	6,308	2,575	2,816
7/11		2,591	2,841
7/12		2,649	2,885
7/13		2,665	2,916
EOS		2,729	2,916

Chinook Salmon Table A3. Percent of run complete according to various historical run timing scenarios.

Timing	Midpoint	7/10 Cumulative %
Earliest	6/15	100%
Early 10%	6/18	98%
Early 25%	6/21	97%
Median	6/23	96%
Late 25%	6/24	94%
Late 10%	6/26	90%
Latest	7/3	78%

Informational Packet

Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
7/7	3,695	1,410	1,261	4,333	3,145	3,311	3,982
7/8	4,092	1,618	1,342	4,463	3,324	3,497	4,200
7/9	4,601	1,733	1,368	4,530	3,800	3,618	4,388
7/10	4,945	1,892	1,392	4,765	4,233	3,741	4,574
7/11		2,111	1,425	4,910	4,363	2,769	3,375
7/12		2,155	1,492	5,153	4,554	2,925	3,568
7/13		2,288	1,521	5,407	4,599	3,102	3,779
EOS		3,894	2,943	6,343	5,708	5,156	6,496

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
7/7	7,323	3,333	2,316
7/8	7,832	3,392	2,388
7/9	8,256	3,603	2,706
7/10	9,240	3,844	3,400
7/11		3,971	4,333
7/12		4,229	5,241
7/13		4,554	5,427
EOS		5,304	5,669

Chum Salmon Table A3. Percent of run complete according to various historical run timing scenarios.

Timing	Midpoint	7/10 Cumulative %
Earliest	6/24	96%
Early 10%	7/1	88%
Early 25%	7/3	82%
Median	7/6	68%
Late 25%	7/7	60%
Late 10%	7/10	49%
Latest	7/12	42%

Informational Packet

Sockeye Salmon Appendix

Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
7/7	1,363	1,142	1,505	1,181	1,009	1,307	1,309
7/8	1,683	1,206	1,565	1,220	1,023	1,339	1,341
7/9	1,766	1,242	1,651	1,250	1,062	1,371	1,367
7/10	1,802	1,417	1,688	1,264	1,067	1,392	1,384
7/11		1,470	1,739	1,280	1,085	1,165	1,181
7/12		1,548	1,781	1,282	1,107	1,210	1,217
7/13		1,606	1,802	1,294	1,117	1,254	1,261
EOS		2,463	2,157	1,367	1,146	1,661	1,603

Sockeye Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
7/7	268	248	669
7/8	286	248	742
7/9	286	265	948
7/10	304	326	1,020
7/11		326	1,107
7/12		358	1,221
7/13		358	1,221
EOS		405	1,245

Sockeye Salmon Table A3. Percent of run complete according to various historical run timing scenarios.

Timing	Midpoint	7/10 Cumulative %
Earliest	6/23	100%
Early 10%	6/24	97%
Early 25%	6/26	96%
Median	6/28	94%
Late 25%	6/30	91%
Late 10%	7/3	81%
Latest	7/11	47%

Informational Packet

Subsistence Division Update to the Working Group, 7/12/2017

Households' reported progress toward harvest goals as of July 11, 2017

Sample fishers from:

- Lower Kuskokwim – Nunapitchuk, Napakiak, Napaskiak, Oscarville, Bethel
- Middle Kuskokwim – Kalskag, Aniak, Chuathbaluk

During the 2017 season, Subsistence Division staff have maintained contact with approximately 70 volunteer fishers in a number of Kuskokwim River communities. The purpose of talking to people has been to get as much inseason information as possible about fishing activities. Some of this information has included data about harvest and effort during previous fishing openings. With the season open until further notice, we are no longer able to provide informative summaries of harvest and effort data for the Working Group.

We are still in contact with our volunteers. To assess how their households are progressing toward their goals for salmon this year, fishers were asked the following question: *When you think about all of the fish your household will need for the year, how close are you to being done?* Each person was asked to choose from one of the following possible responses: *Just starting, one quarter, one half, three quarters, or done.* Several fishers also volunteered that they are done catching Chinook, chum, and sockeye, but were waiting to harvest coho. Figure 1 shows results from lower Kuskokwim fishers, Figure 2 from middle Kuskokwim fishers. This is the most recent information collected as of July 11, in comparison to information from fishers contacted during the previous week (responses as of July 3).

Figure 1.

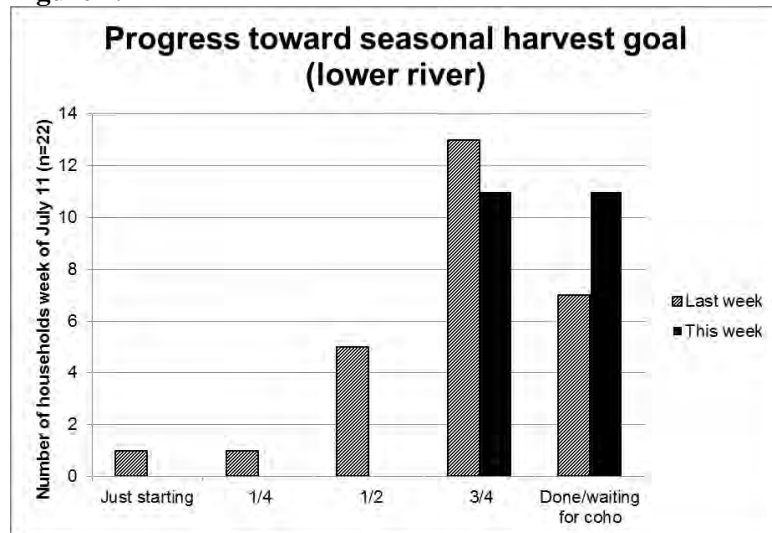
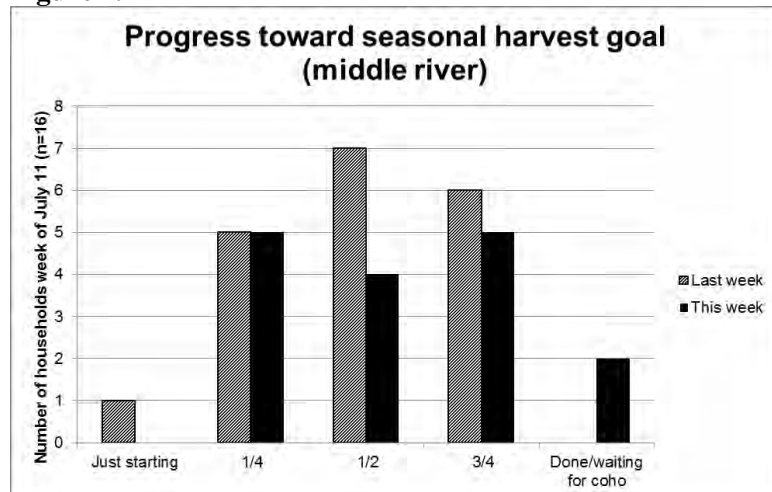


Figure 2.



Informational Packet

Dave Cannon's Special Action Request Submitted To The Federal Subsistence Board

Why did I, as a private individual, submit a Special Action Request? Here is my reasoning:

I am perplexed over how few people within the Kuskokwim drainage fully understand what conservation means; I've occasionally heard that word stated in the same sentence that people asked for an opening when all indicators showed a poor return.

Many people and organizations talk the talk...but few are willing to walk the walk.

Here is an excerpt from another Special Action Request by the Kuskokwim River Inter-Tribal Fish Commission (KRITFC) submitted on March 1 to the Federal Subsistence Board: *We ask the Federal Subsistence Board to adopt and apply the attached pre-season management strategy. This document proposes establishment of a transparent and defensible trigger point to guide the FSMP as to when to implement Title VIII of ANILCA and assume management of the king salmon run on the Kuskokwim River during the 2017 season. This trigger point is composed of three components:*

a) A conservative escapement target (essentially the same escapement target used in 2016, which is also supported by both the state and federal agencies and advisory groups.....

This proposed pre-season management plan demonstrates our willingness to take strong conservation measures. We know these measures are necessary to insure Kuskokwim River king salmon populations will recover and forever remain a sustainable resource for future generations.

We request that the management of this fishery be conservative and implement the principles of precautionary management in response to limited data and high levels of uncertainty.

Let's jump back to January 30 to KRITFC's proposed *Pre-Season Management Strategy* - here are several excerpts:

PRIORITY #1: Set Precautionary Escapement Target: *The drainage-wide escapement goal established by ADF&G for Kuskokwim River King Salmon is 65,000-120,000. However, this stock has just undergone several years of some of the lowest returns in the past 40 years and recovery has been slower than in previous declines. During rebuilding of the run, we recommend managing toward the upper 75% of the current drainage-wide escapement goal range, or at least 106,250 King Salmon.*

Informational Packet

PRIORITY #3: Apply Precautionary Buffer:*We recommend a precautionary buffer of 10% for Kuskokwim River King salmon. Several factors require inclusion of a precautionary buffer, including:*

- *Uncertainty in stock assessment data.*
- *Preliminary results from ADF&G for the 2014-2016 mark-recapture study provides evidence that the existing run reconstruction model may overestimate total return abundance.*
- *Uncertainty in inseason assessment.*
- *Documented declines in escapement quality - declining ration of females, spawners returning smaller, and loss of older ages - all can contribute to fewer eggs in the gravel per spawner.*
- *The critical need to protect the smaller, currently less productive sub-populations which are more vulnerable to overharvest under small drainage-wide returns such as currently exist on the Kuskokwim River.*

KRITFC's *Pre-Season Management Plan* goes on for 105 pages supporting their precautionary management approach...but what happened once the run showed up and appeared to be the weakest run on record?

What happened this season regarding king salmon management went TOTALLY against KRITFC's Special Action Request and management plan; very few people stood up for our kings the past few weeks, even though it was noted time and time again by both the FWS and ADF&G that this year could be the worst run on record and how we would likely NOT meet the 65,000 minimum drainage-wide escapement.

Fishermen, most Working Group members, KRITFC, and both FWS and ADF&G - totally disregarded the precautionary principle for our "beloved" king salmon. The two fishing openings within a three-day period supported by FWS and KRITFC on June 30 and July 3rd are the best example of that...but there were others supported by the Working Group.

I'll close with one final excerpt from KRITFC's March 1 SAR: *We are perplexed by that this precautionary, conservative, best-science approach we have proposed to rebuild our king salmon populations has only received lukewarm reception, and no commitment from the federal and state managers who have reviewed it. Ultimately, we are the people who will suffer if agency management actions don't address sustainability of Kuskokwim king salmon, and we want to responsibly participate in the process.*

I'm perplexed as to the lukewarm approach most everyone took at conserving king salmon this season when the indicators showed how bleak it could be...including the two agencies tasked with protecting the salmon.

Hence - the primary purpose for the Special Action Request I submitted was to follow KRITFC's proposed management plan; in essence protect the few remaining

Informational Packet

kings of what now appears to be a later run timing than thought - getting us closer to the lower end of the escapement goal.

The secondary goal is to provide area residents adequate opportunity for subsistence harvest of silver salmon in the coming weeks because for many, subsistence needs have not been met.

Respectfully...and for the king salmon of the Kuskokwim River.

Dave Cannon

Past Middle-River Salmon Management Working Group member

Let this be my resignation letter from the Kuskokwim River Salmon Management Working Group.

Informational Packet

To: Anthony Christianson, Chairman
Federal Subsistence Board

July 6, 2017

From: Dave Cannon, Aniak

Subject: Federal Special Action Request for Consideration by the Federal Subsistence Board
Regarding Kuskokwim River Salmon Management

Dear Mr. Christianson:

I am a longtime resident of the Kuskokwim, a fisheries biologist, and a Kuskokwim River Salmon Management Working Group member. As a concerned and informed individual, I feel I have an obligation to future generations of subsistence users - and to the Chinook salmon themselves - to make this special action request (SAR) to the Federal Subsistence Board (FSB) to correct what I see as violations of sound management policies...particularly federal policy. I have consistently expressed my conservation concerns for Chinook salmon at Working Group meetings and to both the State and Federal In-Season Managers in Bethel with no resolution.

My SAR requests FSB take three immediate actions:

1. That the FSB rescind the In-Season Fisheries Management Authority of the Yukon Delta National Wildlife Refuge (YDNWR) Manager for the remainder of the 2017 fishing season.
2. That the FSB take over In-Season Management of the fishery based on conservation principles of Chinook stocks as identified in sections 815(1) & 816(b) in Title VIII of ANILCA.
3. That FSA 3-KS-01-17 be extended beyond August 10, 2017 to include management of the chum, sockeye, and coho salmon fishery.

Justification for SAR:

For the first SAR - rescinding the in-season management authority of the YDNWR Manager: The current management situation between the Kuskokwim River Intertribal Fisheries Commission (KRITFC) and the FWS is not representative of the wishes of many people that share my conservation concerns. Meetings between the two groups are not open to the public while analyses and deliberations are not shared; subsequently, management decisions are being made without opportunity for full public input. Additionally, the management decisions to date appear to have been based more on social concerns rather than sound conservation principles.

During several Working Group meetings, the federal in-season manager was asked to justify allowing the harvest of several thousand Chinook salmon despite stating that the FWS's own analyses suggested the lower end of the SEG (65,000) wouldn't be met (something which could potentially jeopardize the viability of the Chinook salmon population). However, he provided no firm evidence or analysis to support his contention that it would not do harm to the run.

Informational Packet

On June 28th the Working Group passed a motion to not have any subsistence openings until July 3rd – this was in regards to the acknowledgement by both the FWS and ADF&G that the minimum drainage-wide escapement goal of 65,000 kings would likely not be met. Yet on June 30th, the Refuge Manager announced openings for July 1st **and** 3rd. A partial river harvest estimate from the mouth to Akiak by YDNWR staff for those two days totaled 1,700 Chinook salmon.

Looking at ADF&G's sonar counts as of July 4 - the estimated total passage of Chinook past Bethel ranges from between 24,500 to 44,300. ADF&G estimates that if the run timing were normal that 91% of the Chinook would have passed the sonar site. However, the Department believes that the run timing is later than originally thought. If that is the case, using 80% as a liberal approximation, along with the most optimistic end of the range - total escapement above Bethel will only be 55,000 (44,300/.8).

As my own evidence, I submit that the FSB review the OSM staff analysis found on page 23 of FSA17-03 discussing the uncertainty associated with Kuskokwim Chinook population dynamics and stock recruitment relationships. Additionally, the preseason forecast appears to have overestimated this year's run size and the run timing model now appears incorrect. I realize that these types of "modeling" exercises have a great deal of uncertainty associated with them. However, from the start, the Refuge Manager has put too much weight in them despite overwhelming in-season assessment data to the contrary.

In the Federal Fisheries Delegation of Authority memo under section 6. *Guidelines for Delegation*, subsection 5. "...the Federal Subsistence Board may determine that a special action request should not be handled by the delegated official but by the Board itself (i.e. rescind the delegated authority for that specific action only).", it's clear that the FSB has the authority to directly manage the Kuskokwim fishery - if you so choose.

The second SAR - to manage the Chinook salmon fishery for conservation first and foremost

"(1) granting any property right in any fish or wildlife or other resource of the public lands or as permitting the level of subsistence uses of fish and wildlife within a conservation system unit to be inconsistent with the conservation of healthy populations, and within a national park or monument to be inconsistent with the conservation of natural and healthy populations, of fish and wildlife. No privilege which may be granted by the State to any individual with respect to subsistence uses may be assigned to any other individual;"

And in section 816(b), Title VIII of ANILCA:

"...If the Secretary determines that an emergency situation exists and that extraordinary measures must be taken for public safety or to assure the continued viability of a particular fish or wildlife population, the Secretary may immediately close the public lands, or any portion thereof, to the subsistence uses of such population and shall publish the reasons justifying the closure in the Federal Register..."

Informational Packet

Both directives make it clear that nothing in Title VIII of ANILCA is to be construed as permitting any level of subsistence use that is inconsistent with the conservation of healthy populations of fish and wildlife.

This, in a very real sense, is the focus of the issue at hand - precisely how many fish are enough for maintaining a “healthy” or “viable” Chinook salmon population in the Kuskokwim River. I don’t know the answer to that for sure myself; however, I do know that we’re looking at one of the weakest runs on record, one that is well below the historic average. Confounding the issue is that this year’s abundance and run timing appear to be anomalous. Potentially unfavorable in-river environmental conditions (i.e. low, warm, clear water), if they persist, could affect migration and spawning thereby posing serious concerns about spawner/recruit relationships; something that has been raised by other qualified scientists, including OSM staff, and underscores the need for precautionary management.

The third SAR - extending Federal management to the entire fishery beyond August 10, 2017: This is intended primarily for two reasons: first, to allow for conservation measures to remain in place later in the season since managers now believe the Chinook run timing is slightly late, and second, to provide opportunity for federally qualified users to harvest sufficient numbers of coho salmon to meet unfilled needs due to earlier management actions. ADF&G recently announced that a commercial processor has expressed an intention of operating on the Kuskokwim for “mostly” the coho fishery, yet many fishers have expressly indicated they intend to focus more on coho salmon to avoid incidental Chinook harvest or restrictive fishing schedules.

In summary, my heart is heavy not only over the concerns I’ve expressed above, but the implications of the need for people of the region to provide for themselves and families by harvesting a normally renewable resource...the cultural significance of which does not need to be elaborated to you. I know that my actions may appear extreme to many, but try as I might to work within the process available to me, I feel I have to make one final effort for the conservation and future of our Chinook salmon...something that will ultimately benefit the people of the region.

Thank you for your valuable time and consideration, sincerely:

Signature: 

Date: 7/6/2017

Dave Cannon

Cell #: 907-676-0012 E-mail: dcannon4fish@earthlink.net

CC: Gene Peltola - Assistant Regional Director, Office of Subsistence Management, USFWS

Ken Stahlnecker - Refuge Manager, Yukon Delta National Wildlife Refuge

Mary Peltola - Interim Director, Kuskokwim River Inter-Tribal Fish Commission

Aaron Tiernan - Acting Area Manager, Commercial Fisheries: Kuskokwim Area

Supplemental Kuskokwim River Salmon Escapement Data

Salmon escapement projects are located upriver from where the majority of salmon harvest occurs. As such, escapement data provide limited information about the status of salmon runs in season. Data from escapement projects are primarily used post season to assess escapement goals and trends.

Daily escapement information can be viewed online at the ADF&G Kuskokwim Management Area Fish Counts webpage. This can be accessed through the following link:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

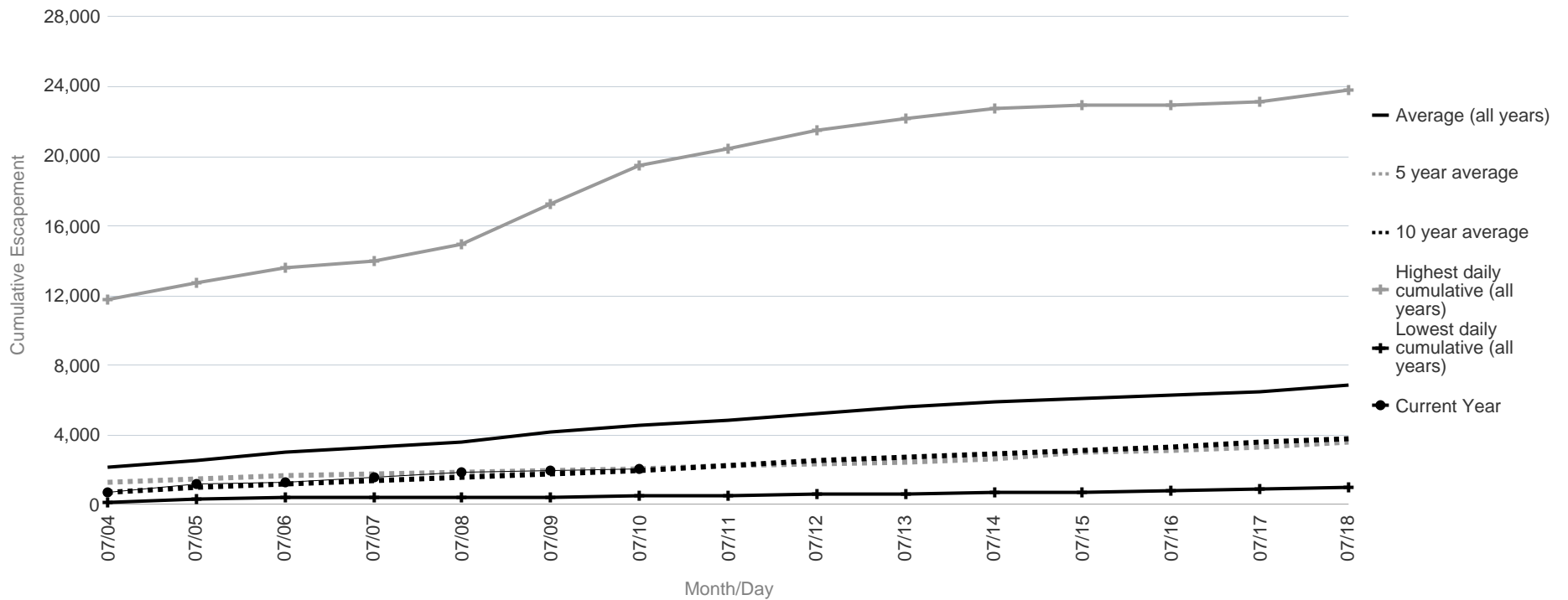
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,100 to 7,500

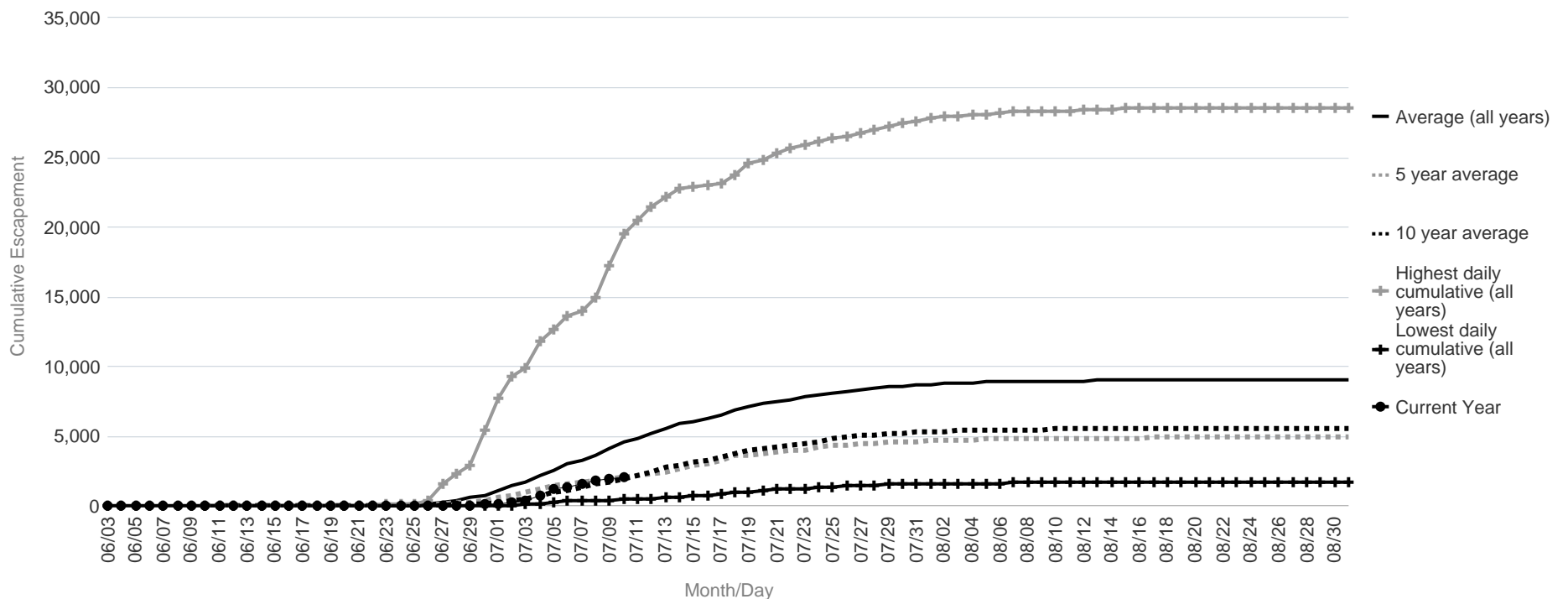
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	135	2,141	1,280	704	11,804	684
07/05	292	2,530	1,439	961	12,700	1,197
07/06	360	2,984	1,617	1,144	13,621	1,286
07/07	361	3,285	1,714	1,376	13,960	1,582
07/08	372	3,614	1,815	1,584	14,968	1,870
07/09	405	4,123	1,930	1,755	17,294	1,957
07/10	522	4,540	2,037	1,979	19,489	2,061
07/11	526	4,858	2,232	2,203	20,436	
07/12	557	5,248	2,338	2,474	21,479	
07/13	638	5,586	2,429	2,735	22,122	
07/14	668	5,859	2,660	2,946	22,774	
07/15	699	6,076	2,954	3,140	22,935	
07/16	763	6,257	3,089	3,291	22,978	
07/17	897	6,511	3,308	3,554	23,134	
07/18	970	6,838	3,628	3,807	23,793	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,668	9,073	4,968	5,575	28,605

Focused Two-Week Data View



Season Total Overview

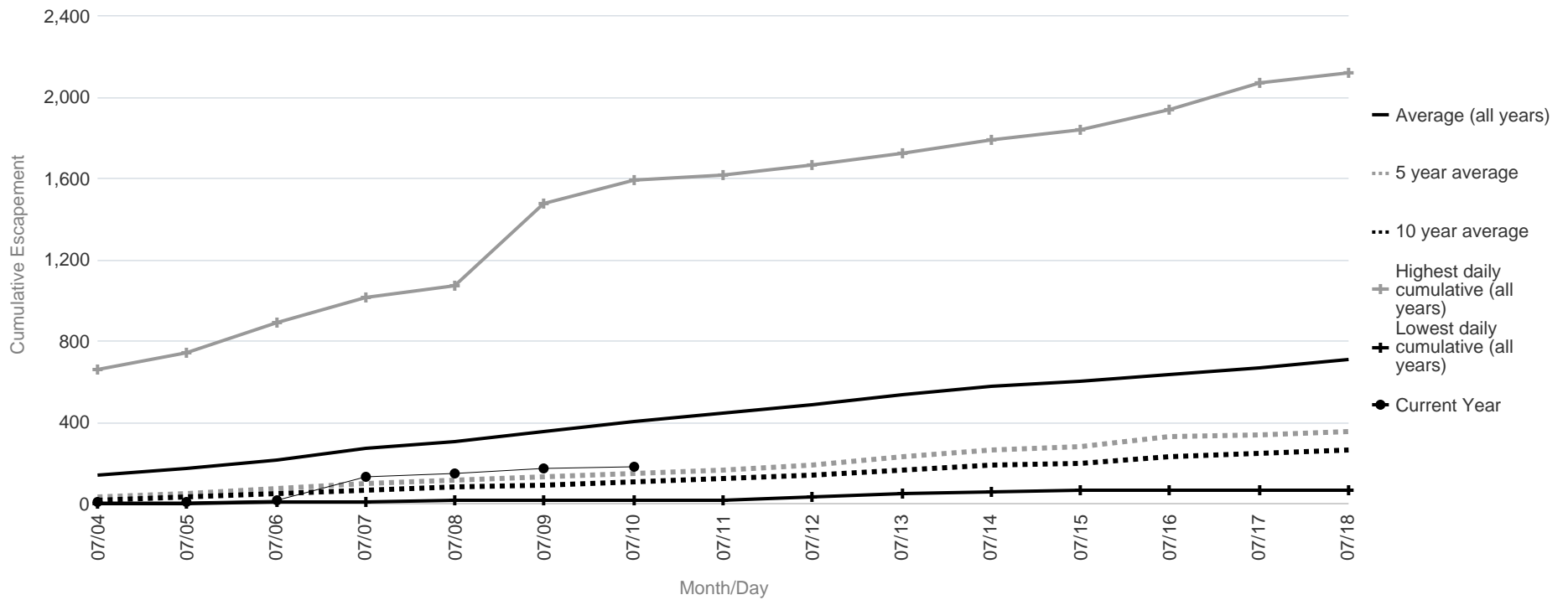


Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

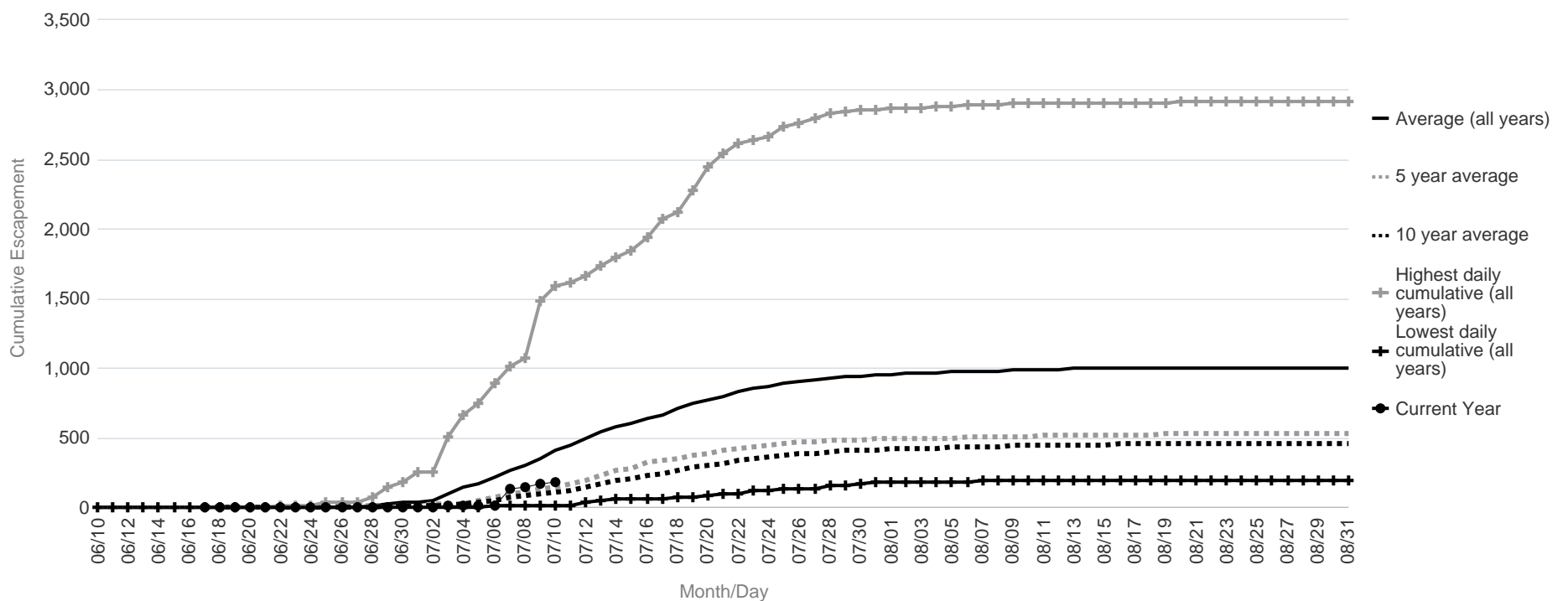
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	3	141	31	22	665	10
07/05	5	174	55	38	744	10
07/06	10	216	74	51	896	16
07/07	12	271	104	69	1,018	131
07/08	16	304	113	81	1,078	150
07/09	17	355	131	95	1,483	171
07/10	17	409	152	112	1,592	183
07/11	17	444	169	126	1,621	
07/12	35	491	189	143	1,667	
07/13	47	539	233	167	1,730	
07/14	62	583	269	191	1,793	
07/15	65	606	285	201	1,845	
07/16	66	639	331	229	1,942	
07/17	66	668	340	245	2,072	
07/18	69	710	356	268	2,119	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	193	1,005	538	461	2,918

Focused Two-Week Data View



Season Total Overview

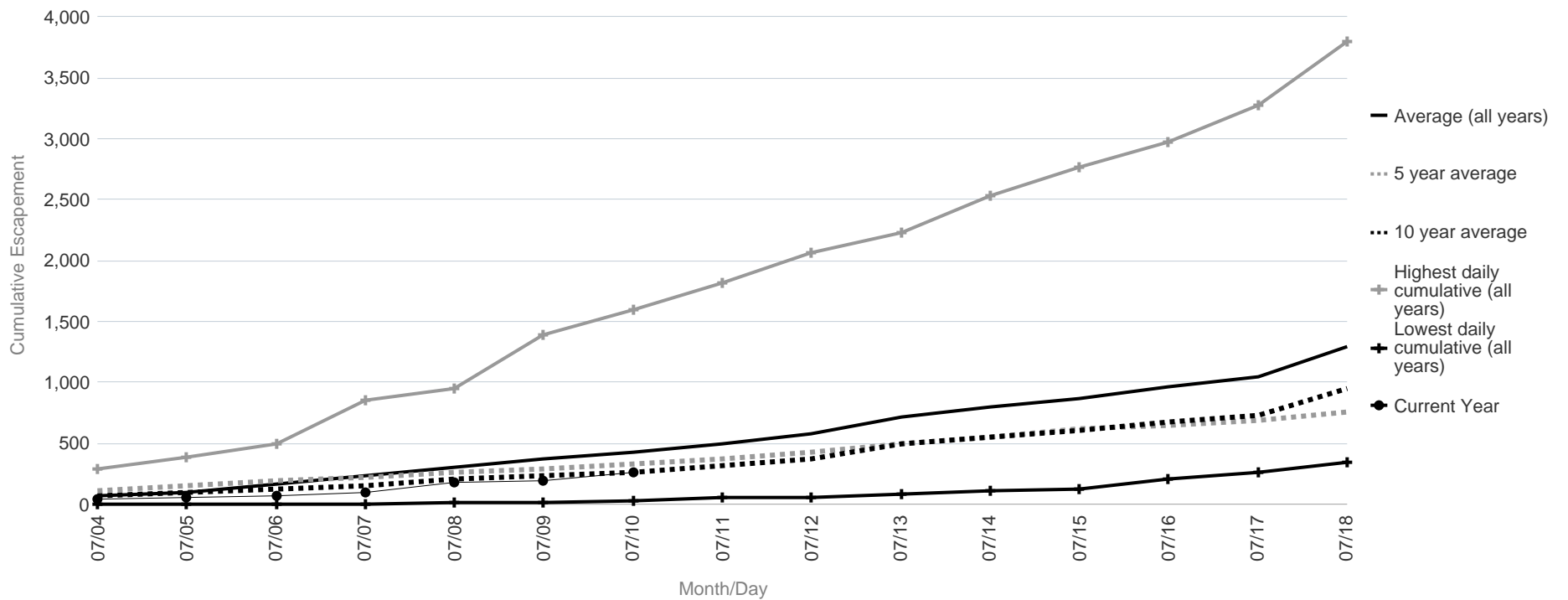


Salmon River (Aniak) Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

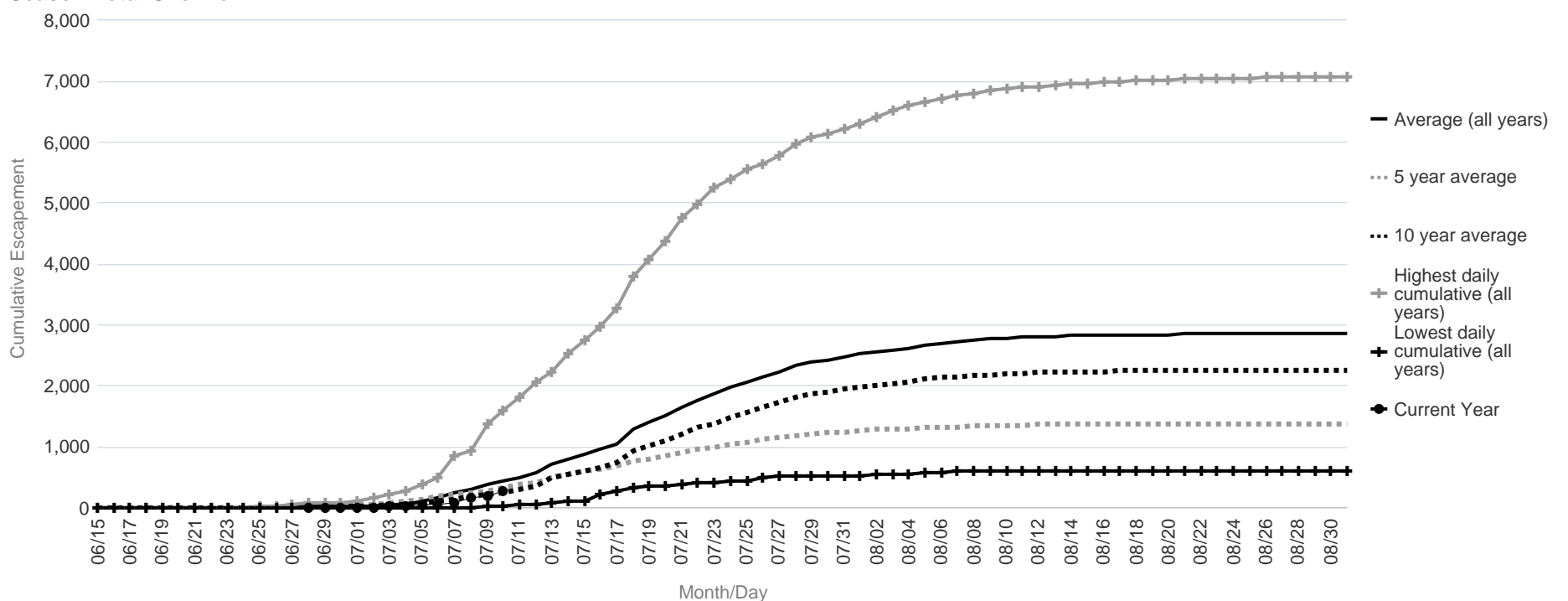
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	0	72	113	72	288	45
07/05	1	103	152	97	384	62
07/06	3	165	197	125	493	66
07/07	6	239	219	151	856	94
07/08	11	302	264	210	947	182
07/09	20	378	293	233	1,392	195
07/10	33	432	328	265	1,599	267
07/11	51	500	379	312	1,817	
07/12	63	581	427	368	2,070	
07/13	85	717	496	501	2,227	
07/14	111	804	555	557	2,533	
07/15	128	875	617	605	2,764	
07/16	211	965	647	677	2,980	
07/17	269	1,053	690	735	3,279	
07/18	344	1,301	762	945	3,794	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	625	2,866	1,391	2,264	7,075

Focused Two-Week Data View



Season Total Overview



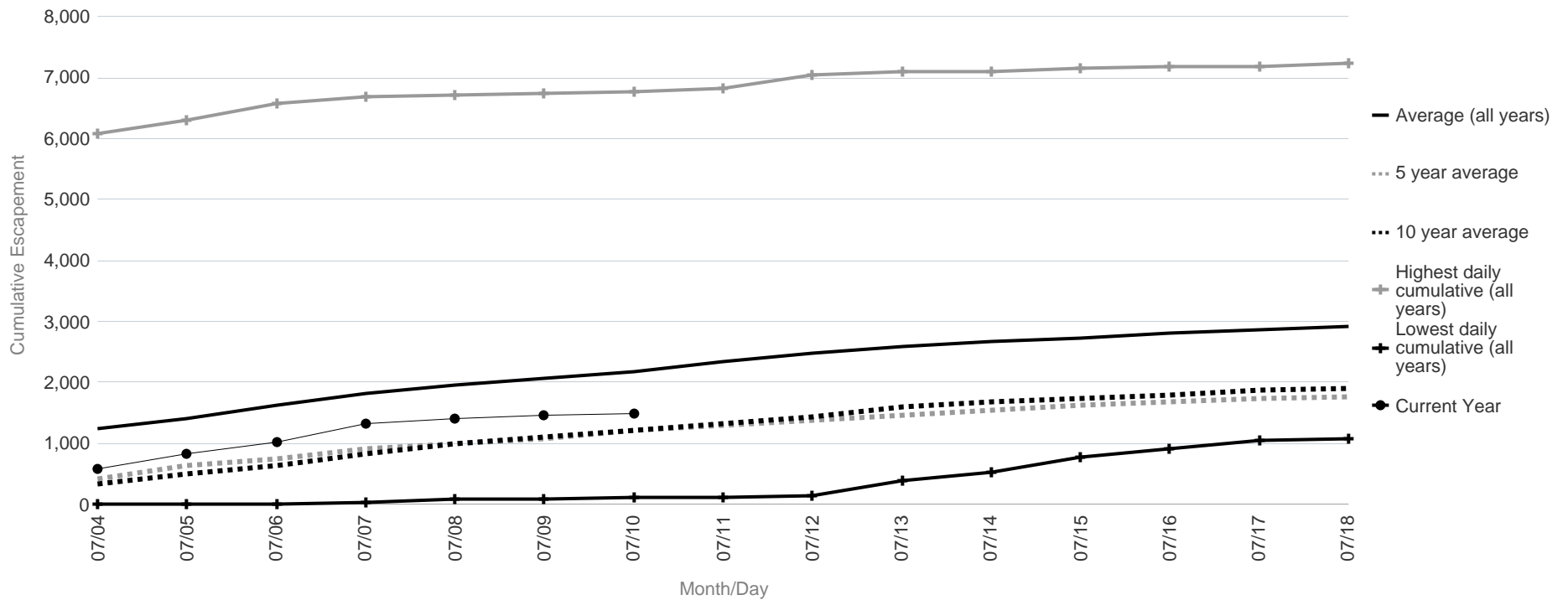
George River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 1,800 to 3,300

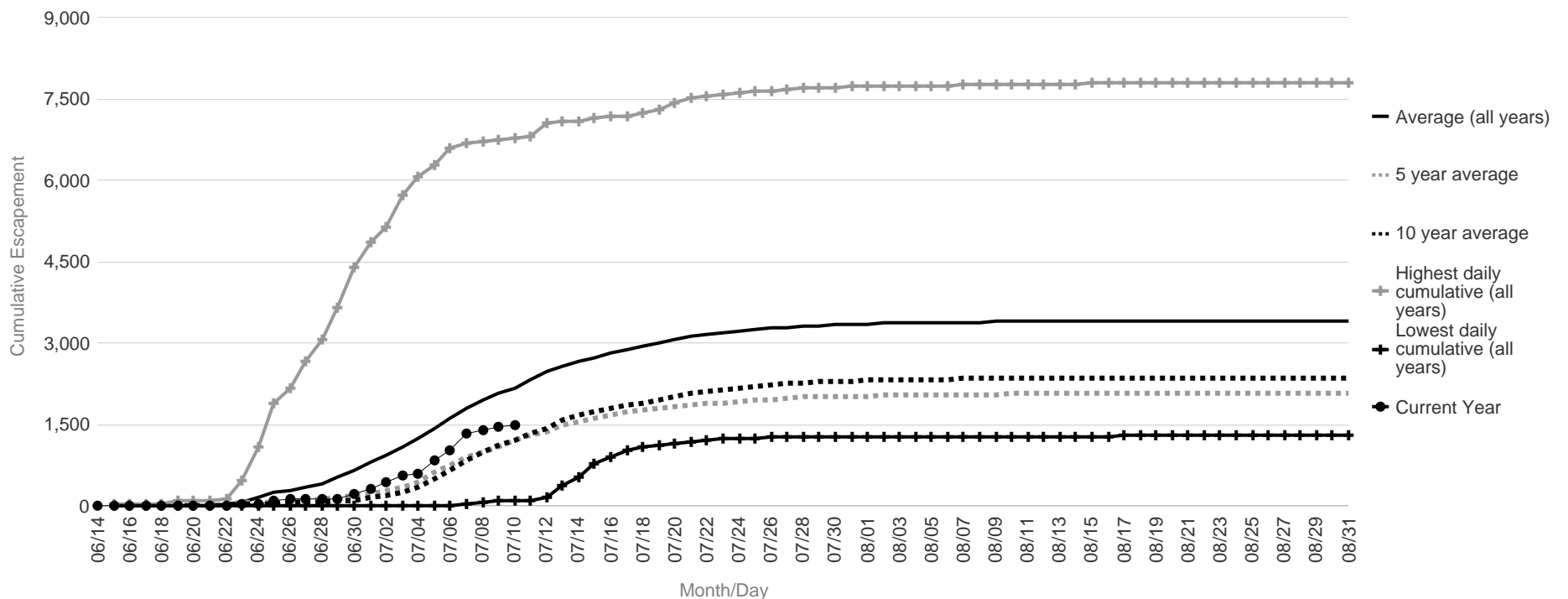
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	12	1,231	429	338	6,075	586
07/05	14	1,415	630	507	6,296	827
07/06	18	1,616	743	645	6,590	1,034
07/07	31	1,808	910	829	6,683	1,324
07/08	81	1,951	996	989	6,717	1,411
07/09	89	2,076	1,089	1,109	6,754	1,465
07/10	102	2,174	1,209	1,222	6,783	1,494
07/11	112	2,333	1,297	1,328	6,816	
07/12	153	2,484	1,373	1,443	7,061	
07/13	384	2,588	1,476	1,588	7,092	
07/14	541	2,665	1,554	1,676	7,103	
07/15	788	2,742	1,617	1,746	7,168	
07/16	910	2,812	1,690	1,806	7,174	
07/17	1,042	2,878	1,727	1,870	7,196	
07/18	1,090	2,932	1,762	1,907	7,238	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,292	3,426	2,086	2,371	7,810

Focused Two-Week Data View



Season Total Overview



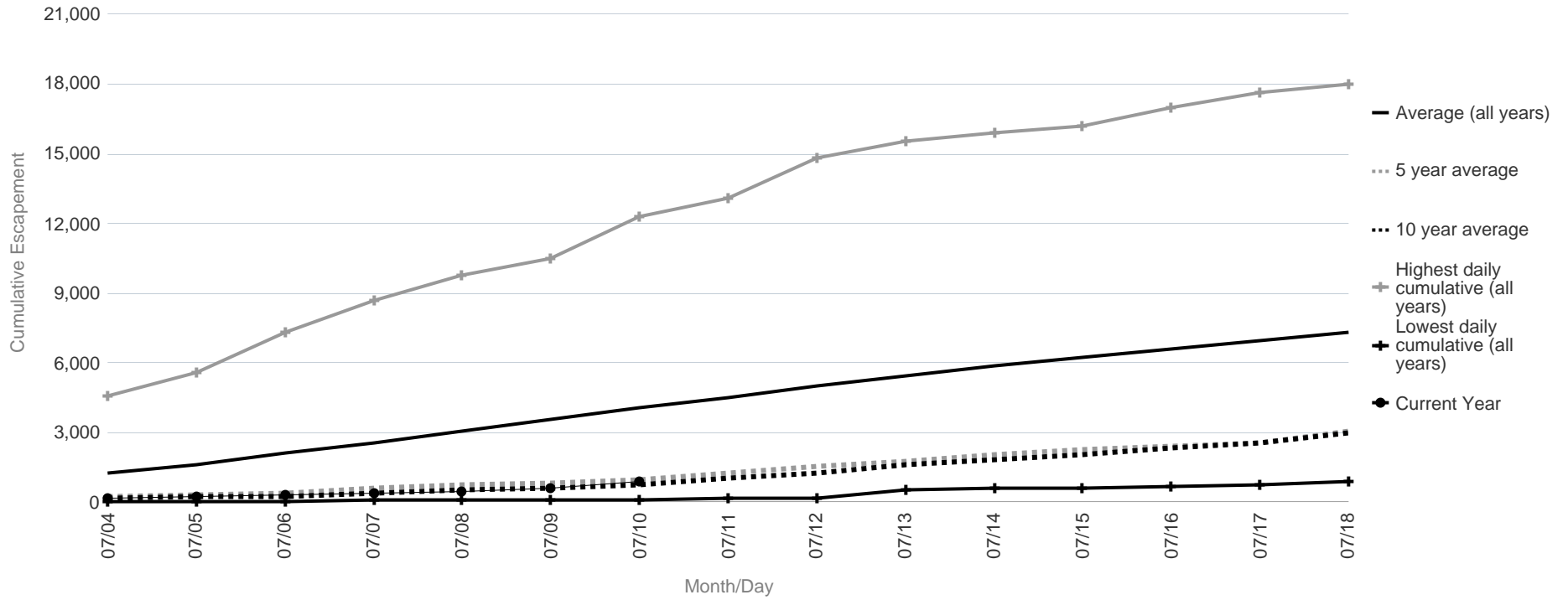
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,800 to 8,800

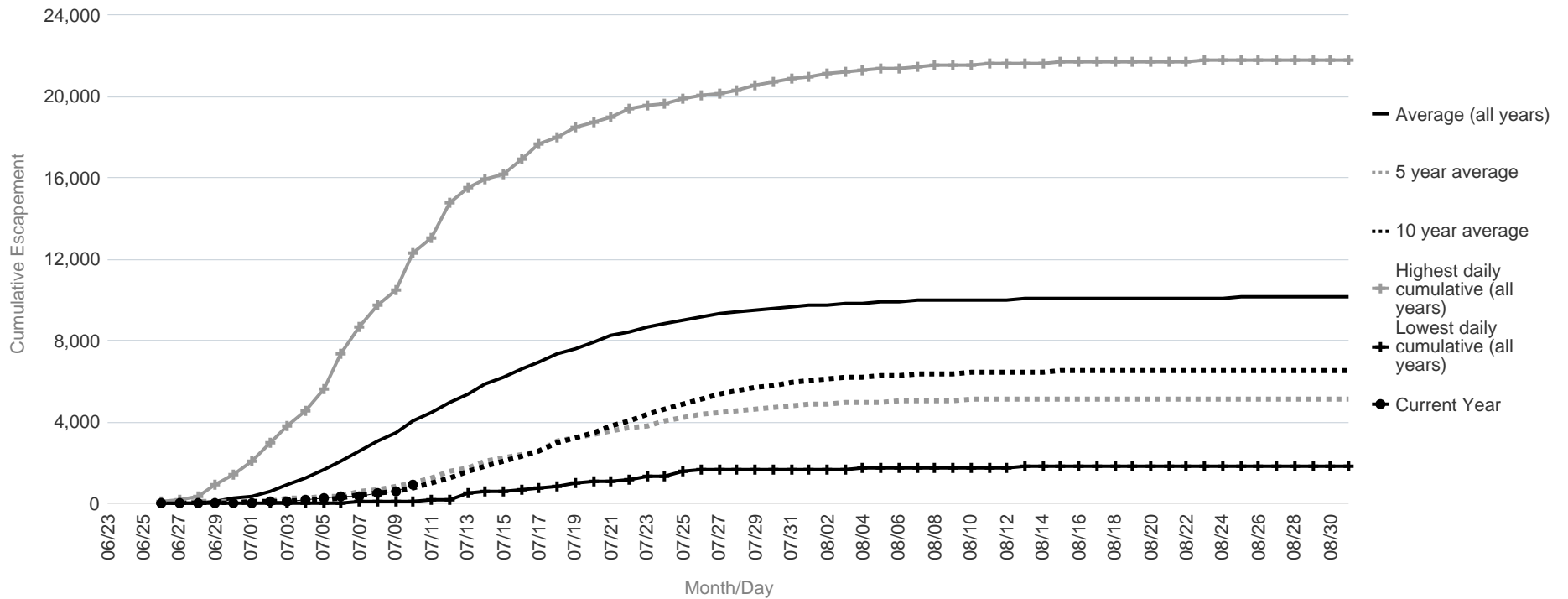
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	1	1,221	264	161	4,588	174
07/05	4	1,629	313	214	5,589	251
07/06	21	2,086	375	261	7,343	307
07/07	56	2,573	589	399	8,649	358
07/08	83	3,038	714	520	9,782	479
07/09	104	3,518	820	616	10,461	555
07/10	116	4,034	964	744	12,287	912
07/11	167	4,469	1,232	989	13,084	
07/12	191	4,976	1,546	1,257	14,798	
07/13	484	5,397	1,781	1,566	15,562	
07/14	574	5,833	2,045	1,850	15,937	
07/15	618	6,194	2,218	2,055	16,183	
07/16	678	6,604	2,368	2,299	16,957	
07/17	739	6,977	2,567	2,556	17,646	
07/18	862	7,335	3,054	2,956	18,019	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,819	10,139	5,172	6,564	21,819

Focused Two-Week Data View



Season Total Overview

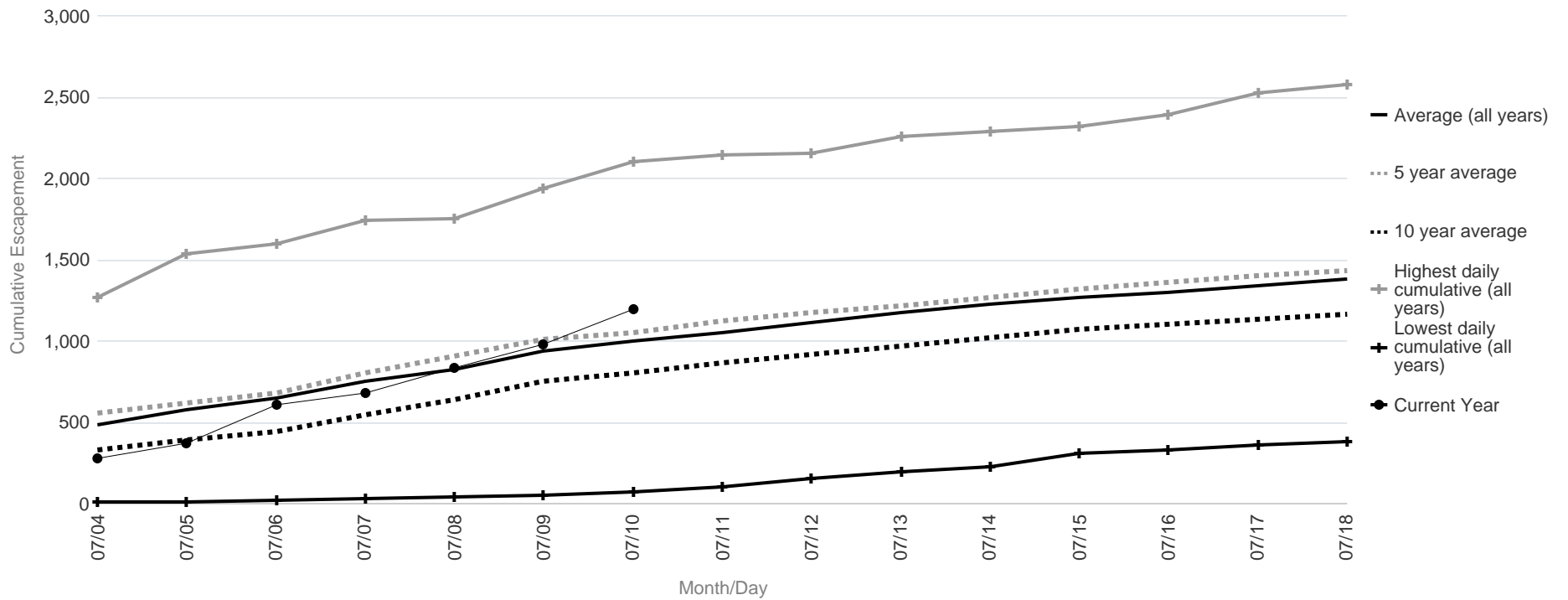


Tatlawiksuk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

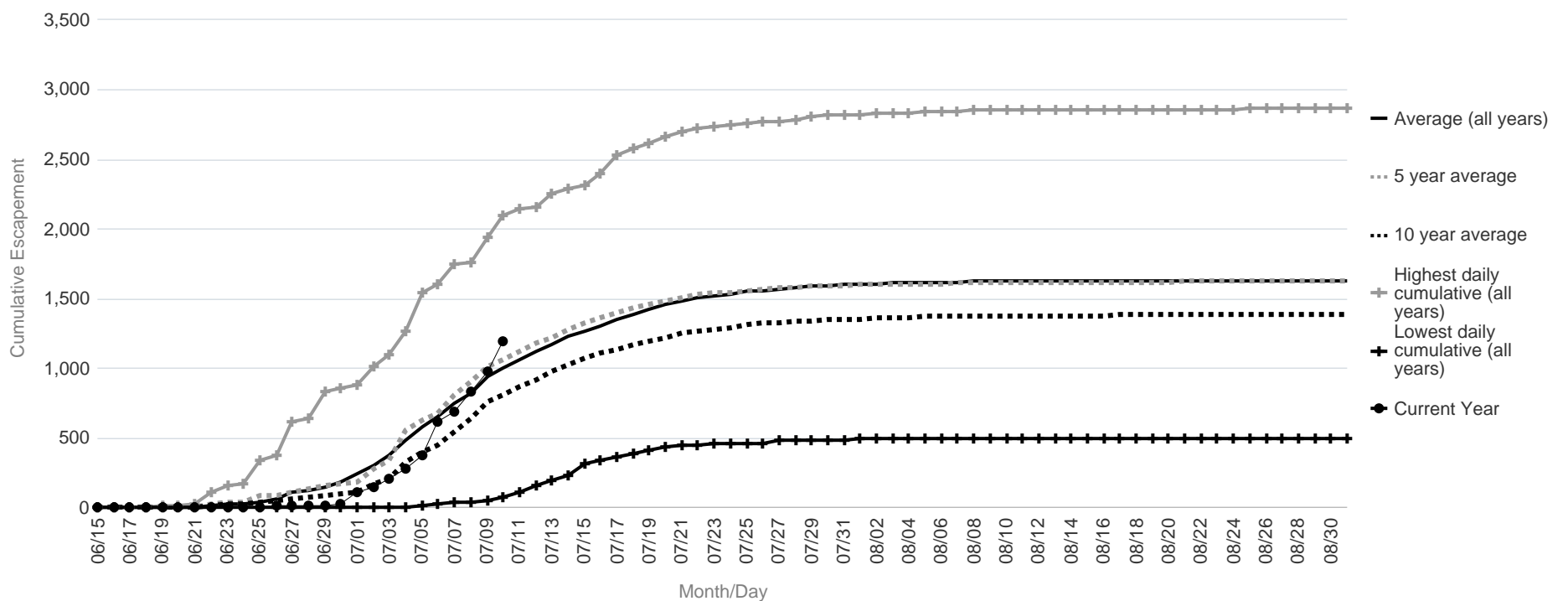
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	7	485	558	332	1,268	280
07/05	12	581	623	398	1,538	375
07/06	21	656	679	446	1,602	612
07/07	35	752	808	548	1,747	687
07/08	43	826	909	639	1,757	838
07/09	54	938	1,013	758	1,937	983
07/10	70	998	1,058	805	2,102	1,199
07/11	109	1,059	1,125	870	2,145	
07/12	160	1,118	1,178	923	2,161	
07/13	195	1,175	1,219	972	2,259	
07/14	229	1,227	1,273	1,028	2,288	
07/15	315	1,272	1,326	1,074	2,319	
07/16	334	1,307	1,362	1,106	2,397	
07/17	367	1,346	1,401	1,138	2,527	
07/18	384	1,388	1,440	1,173	2,580	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	495	1,631	1,623	1,383	2,864

Focused Two-Week Data View



Season Total Overview

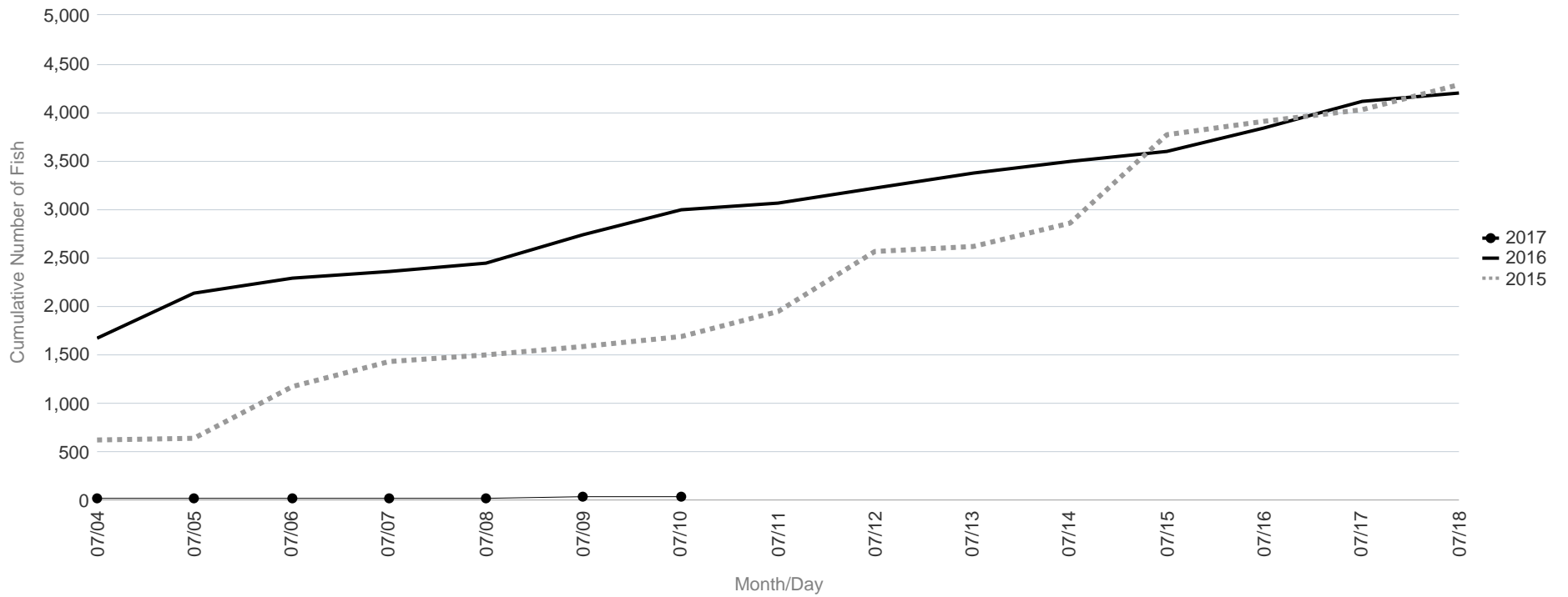


Salmon River (Pitka Fork) Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

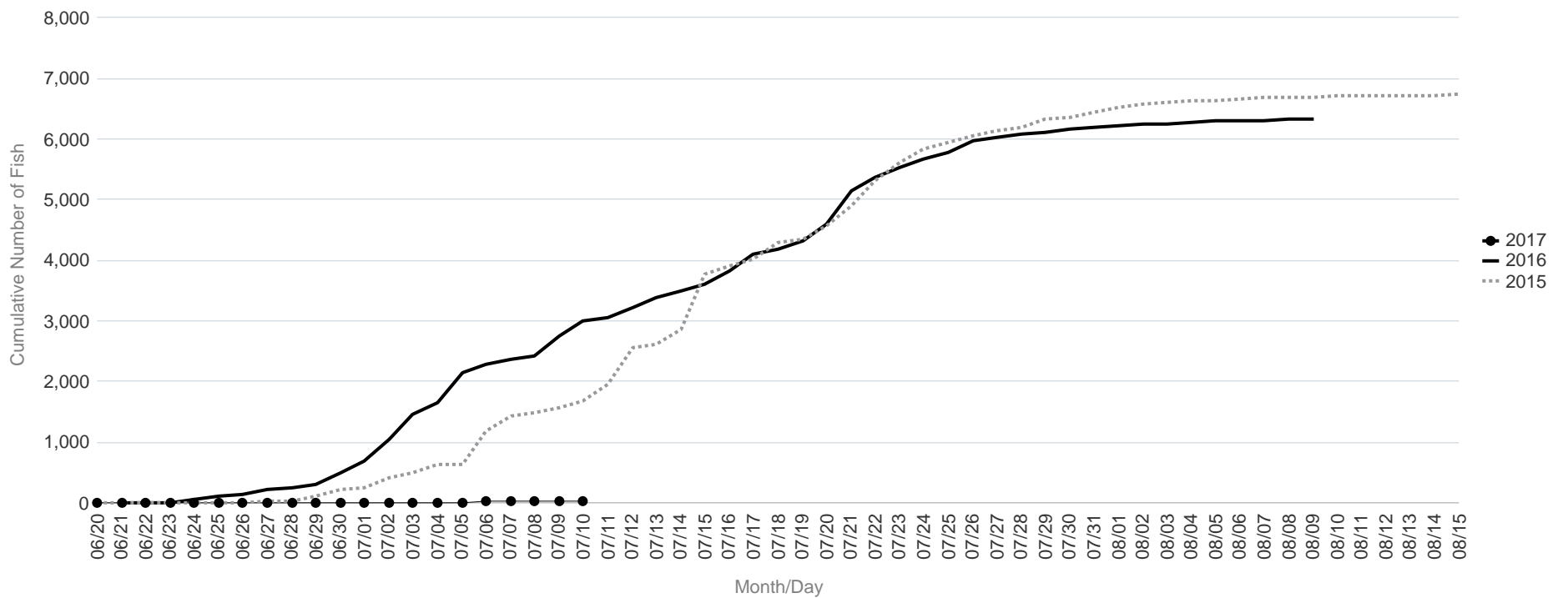
Cumulative Daily Passage			
Date	2015	2016	2017
07/04	629	1,668	15
07/05	644	2,141	17
07/06	1,177	2,284	19
07/07	1,425	2,366	20
07/08	1,493	2,439	21
07/09	1,580	2,746	34
07/10	1,693	2,999	35
07/11	1,945	3,072	
07/12	2,569	3,211	
07/13	2,618	3,376	
07/14	2,858	3,488	
07/15	3,763	3,605	
07/16	3,910	3,839	
07/17	4,022	4,113	
07/18	4,293	4,201	

	2015	2016
Season Total	6,736	6,326

Focused Two-Week Data View



Season Total Overview

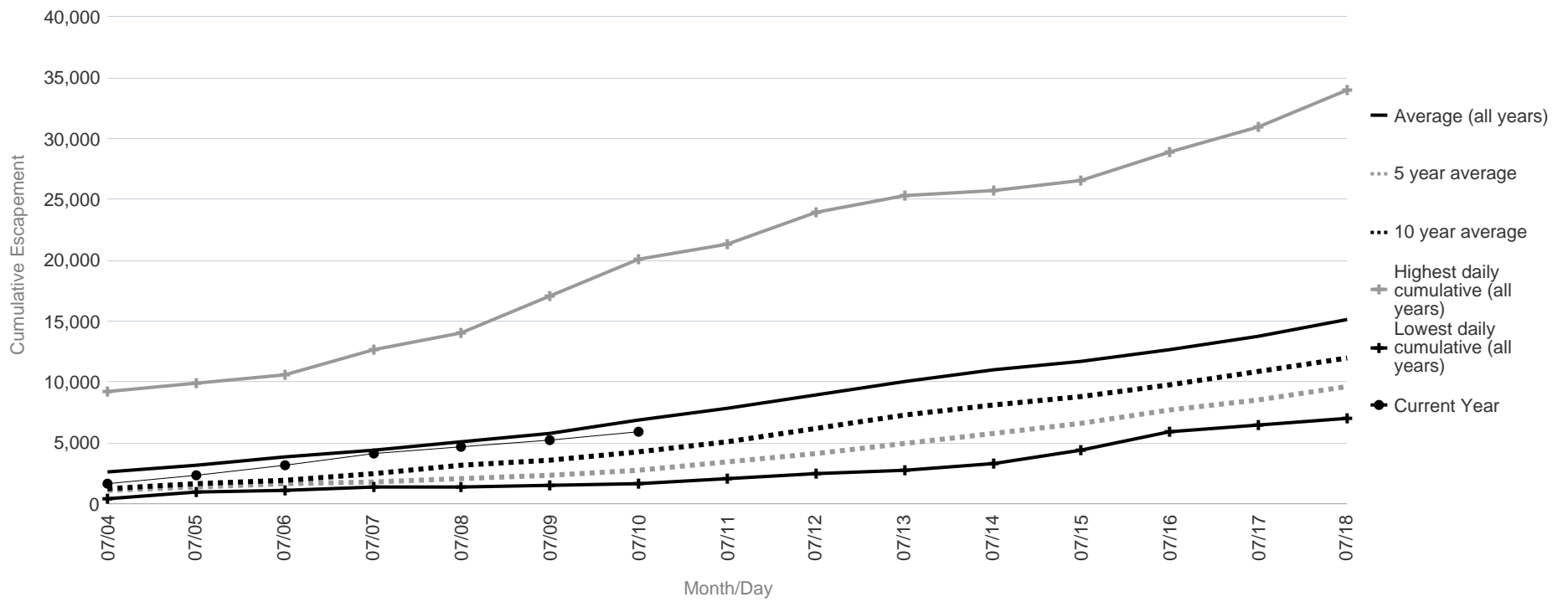


Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

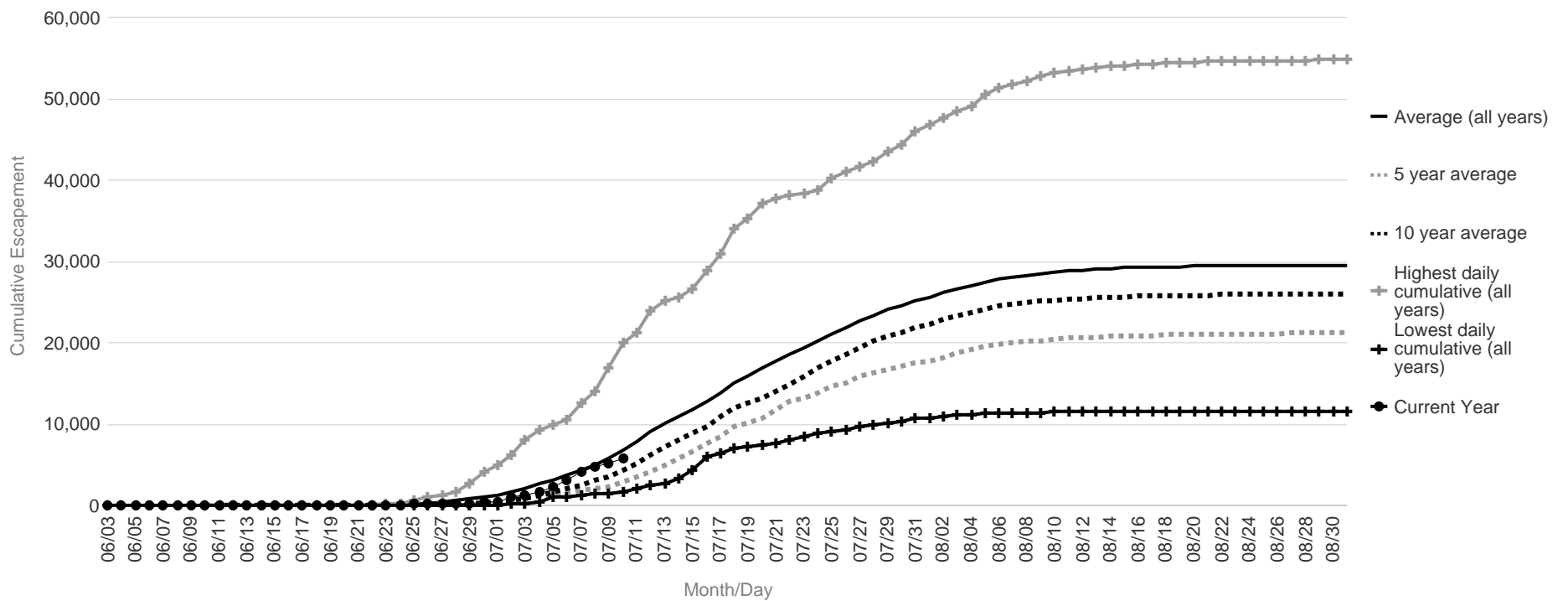
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	475	2,672	1,172	1,206	9,260	1,679
07/05	971	3,224	1,343	1,615	9,965	2,357
07/06	1,116	3,826	1,633	2,012	10,653	3,126
07/07	1,356	4,406	1,835	2,512	12,646	4,147
07/08	1,414	5,071	2,032	3,134	14,065	4,704
07/09	1,552	5,864	2,369	3,646	17,038	5,242
07/10	1,727	6,848	2,843	4,285	20,074	5,912
07/11	2,077	7,817	3,514	5,182	21,339	
07/12	2,442	9,022	4,101	6,224	23,940	
07/13	2,769	10,127	4,956	7,306	25,299	
07/14	3,385	10,998	5,795	8,147	25,719	
07/15	4,386	11,760	6,641	8,820	26,606	
07/16	5,937	12,732	7,662	9,751	28,951	
07/17	6,461	13,822	8,591	10,893	31,045	
07/18	7,027	15,115	9,683	11,980	34,001	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	11,691	29,618	21,294	26,071	54,913

Focused Two-Week Data View



Season Total Overview

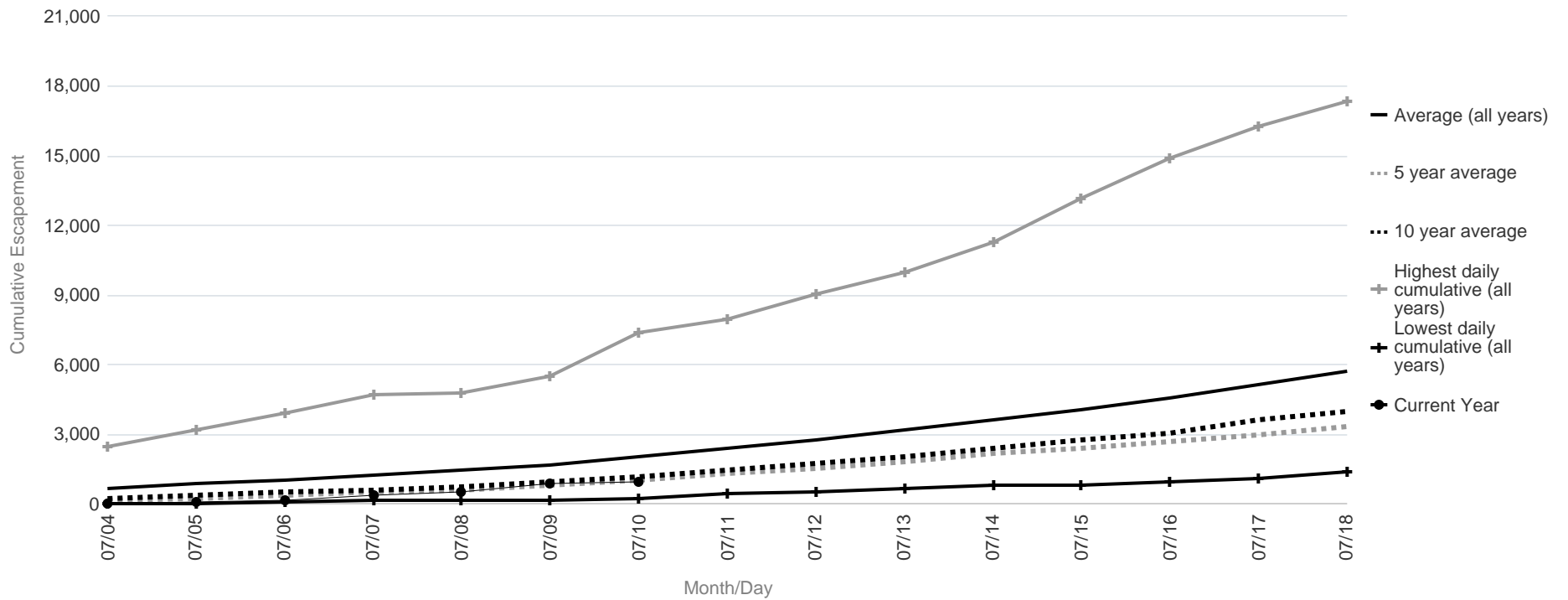


Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

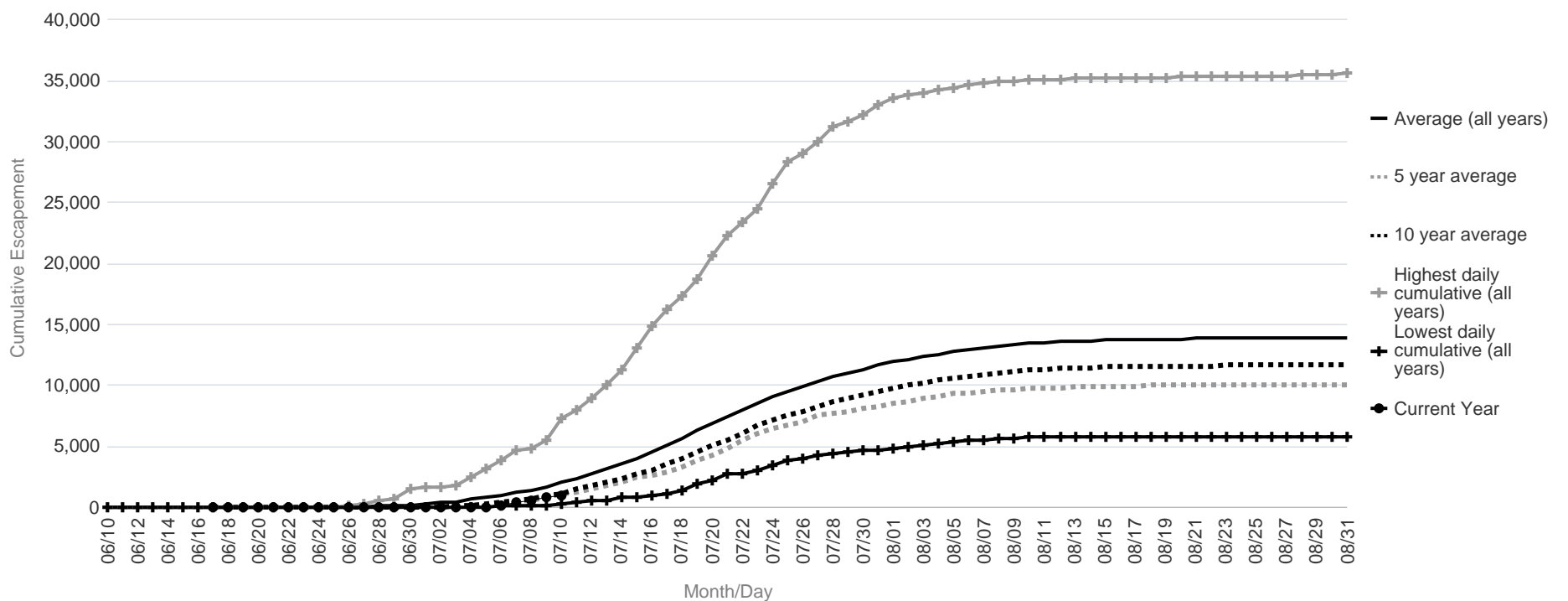
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	35	660	184	228	2,443	30
07/05	44	850	264	351	3,201	49
07/06	101	1,040	390	497	3,881	173
07/07	160	1,272	507	619	4,735	396
07/08	169	1,463	623	733	4,802	543
07/09	176	1,704	822	920	5,535	876
07/10	249	2,049	1,057	1,139	7,346	954
07/11	417	2,407	1,315	1,469	7,974	
07/12	509	2,778	1,519	1,772	9,021	
07/13	627	3,214	1,823	2,065	10,003	
07/14	797	3,606	2,146	2,385	11,302	
07/15	838	4,052	2,431	2,737	13,140	
07/16	945	4,533	2,704	3,073	14,901	
07/17	1,066	5,105	2,980	3,597	16,282	
07/18	1,379	5,696	3,327	4,013	17,371	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	5,868	13,997	10,170	11,741	35,696

Focused Two-Week Data View



Season Total Overview

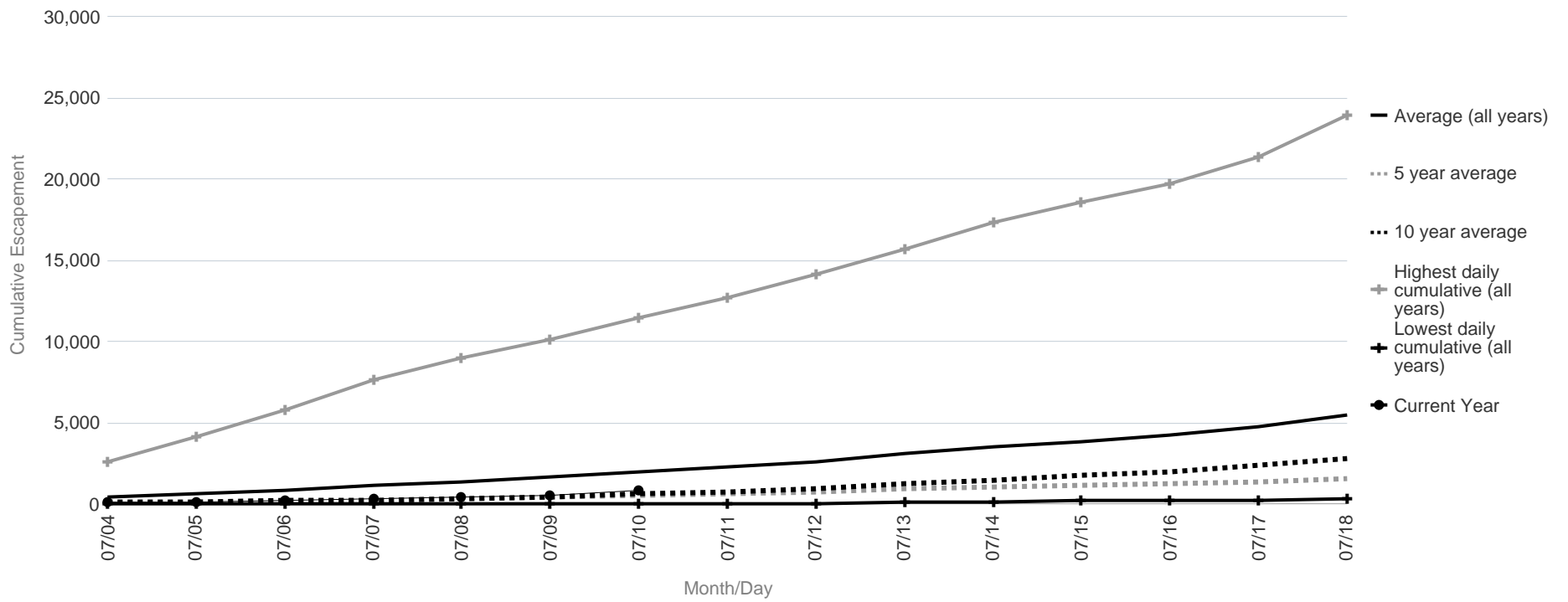


Salmon River (Aniak) Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

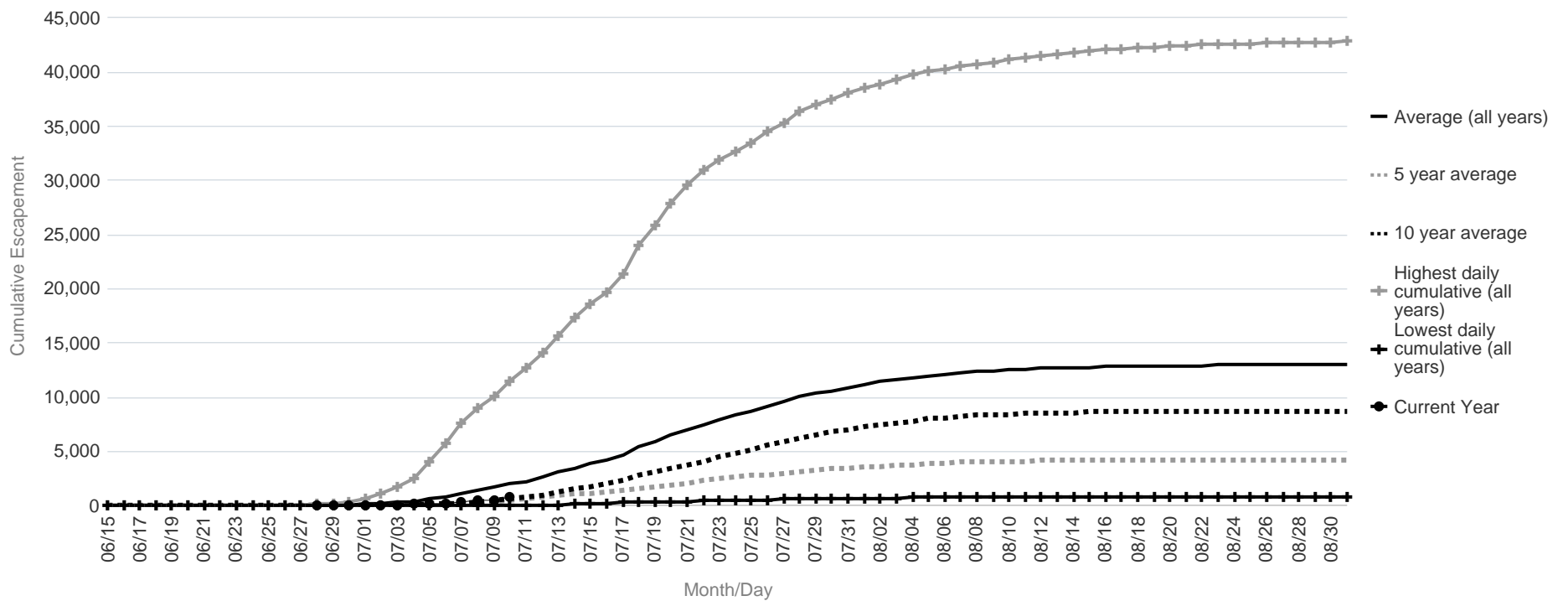
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	0	386	88	76	2,554	137
07/05	0	621	139	121	4,117	162
07/06	0	871	188	172	5,758	209
07/07	1	1,162	237	236	7,644	312
07/08	3	1,406	309	320	9,007	426
07/09	8	1,661	397	455	10,097	556
07/10	17	1,963	518	602	11,488	853
07/11	32	2,249	648	751	12,734	
07/12	57	2,629	776	977	14,188	
07/13	95	3,061	942	1,262	15,654	
07/14	155	3,483	1,054	1,501	17,358	
07/15	195	3,857	1,160	1,747	18,624	
07/16	223	4,205	1,232	1,991	19,700	
07/17	259	4,743	1,387	2,362	21,408	
07/18	291	5,442	1,569	2,791	24,005	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	816	13,013	4,272	8,754	42,825

Focused Two-Week Data View



Season Total Overview

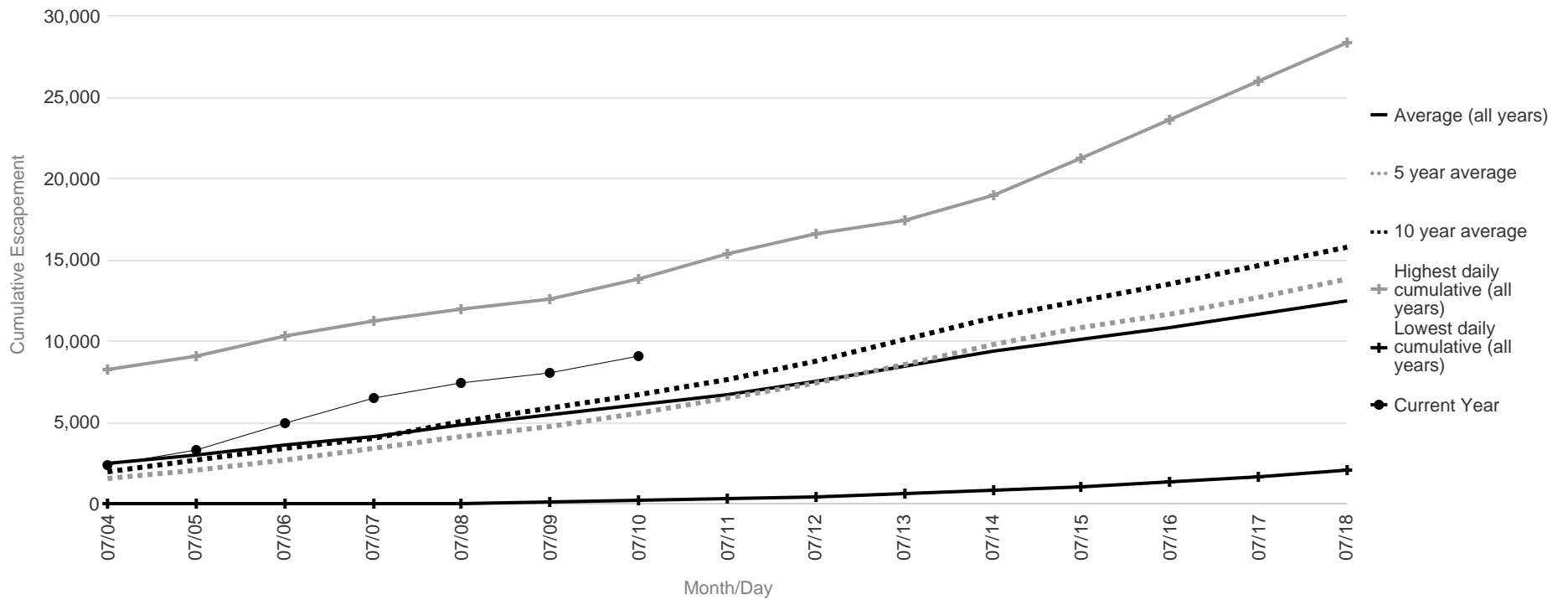


George River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

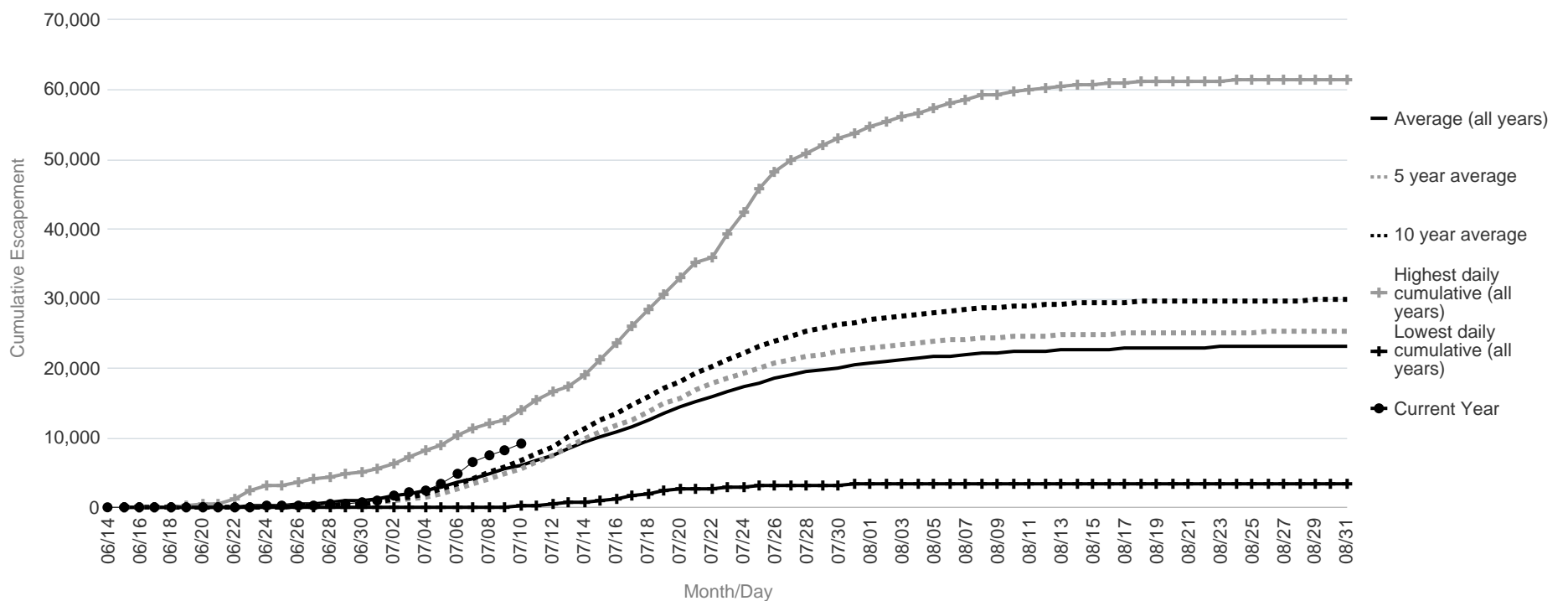
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	3	2,483	1,548	2,026	8,239	2,435
07/05	7	3,020	2,080	2,713	9,060	3,365
07/06	16	3,599	2,660	3,398	10,334	4,934
07/07	33	4,153	3,397	4,047	11,293	6,514
07/08	62	4,827	4,101	5,031	11,972	7,417
07/09	111	5,464	4,778	5,884	12,590	8,117
07/10	186	6,076	5,607	6,719	13,890	9,137
07/11	296	6,775	6,517	7,650	15,426	
07/12	447	7,588	7,423	8,800	16,624	
07/13	646	8,480	8,612	10,126	17,482	
07/14	828	9,385	9,805	11,452	18,971	
07/15	1,022	10,122	10,804	12,488	21,305	
07/16	1,355	10,840	11,722	13,582	23,666	
07/17	1,682	11,628	12,663	14,701	26,030	
07/18	2,076	12,477	13,800	15,857	28,374	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	3,507	23,223	25,344	29,852	61,531

Focused Two-Week Data View



Season Total Overview



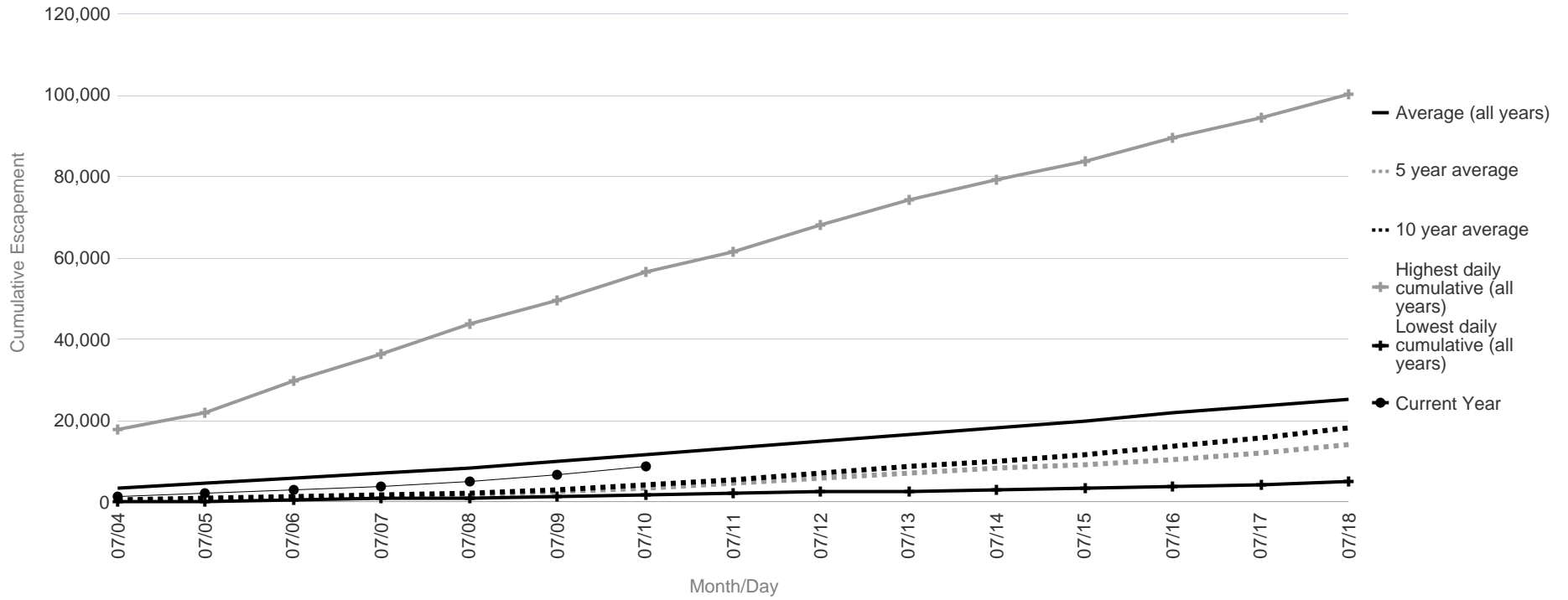
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

Escapement Goal Range: 15,000 to 49,000

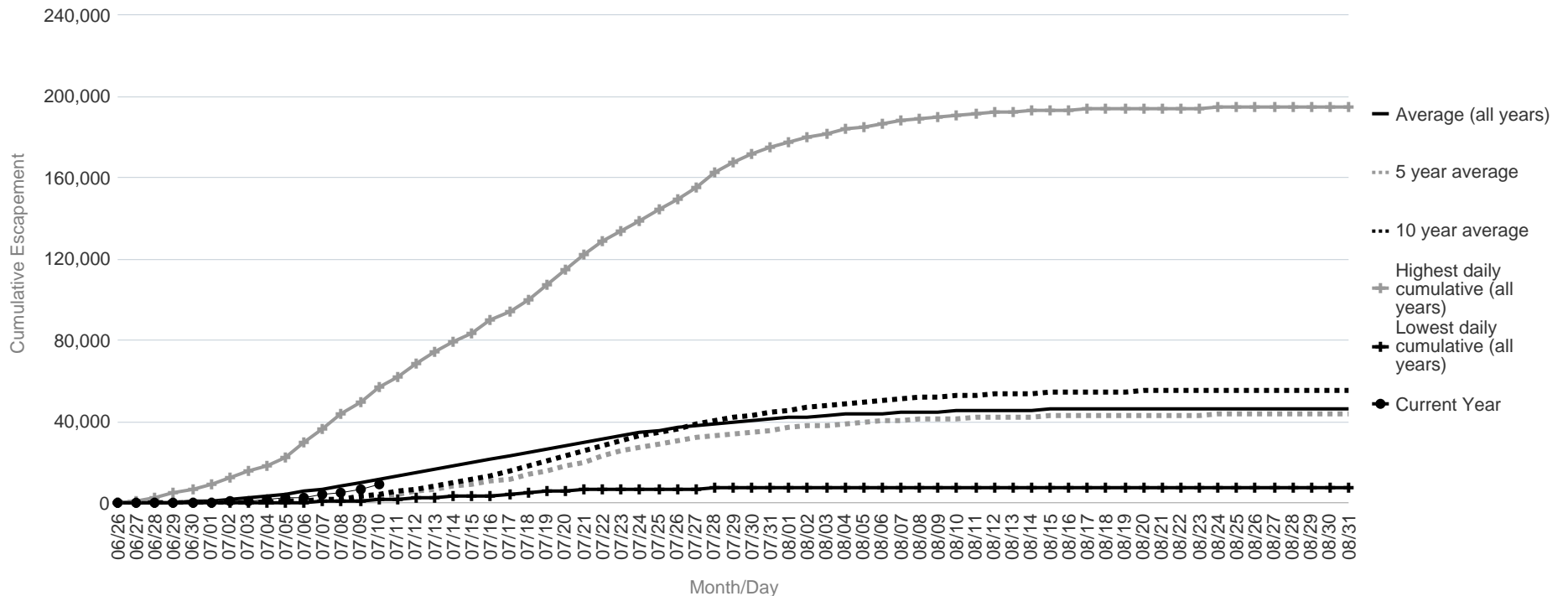
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	124	3,428	524	521	18,024	1,407
07/05	234	4,543	714	781	22,060	2,240
07/06	405	5,799	1,044	1,120	29,780	2,900
07/07	747	7,082	1,404	1,588	36,192	3,916
07/08	893	8,516	1,712	2,174	43,627	4,934
07/09	1,368	10,023	2,364	3,031	49,581	6,603
07/10	1,659	11,679	3,360	4,161	56,718	8,831
07/11	2,122	13,281	4,528	5,527	61,725	
07/12	2,492	14,930	5,851	7,031	68,339	
07/13	2,739	16,540	6,995	8,542	74,233	
07/14	3,063	18,255	8,164	10,015	79,261	
07/15	3,393	19,913	9,232	11,549	83,914	
07/16	3,804	21,790	10,481	13,600	89,805	
07/17	4,321	23,494	12,010	15,814	94,567	
07/18	4,960	25,164	13,989	18,135	100,390	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	7,975	46,748	43,734	55,690	194,887

Focused Two-Week Data View



Season Total Overview

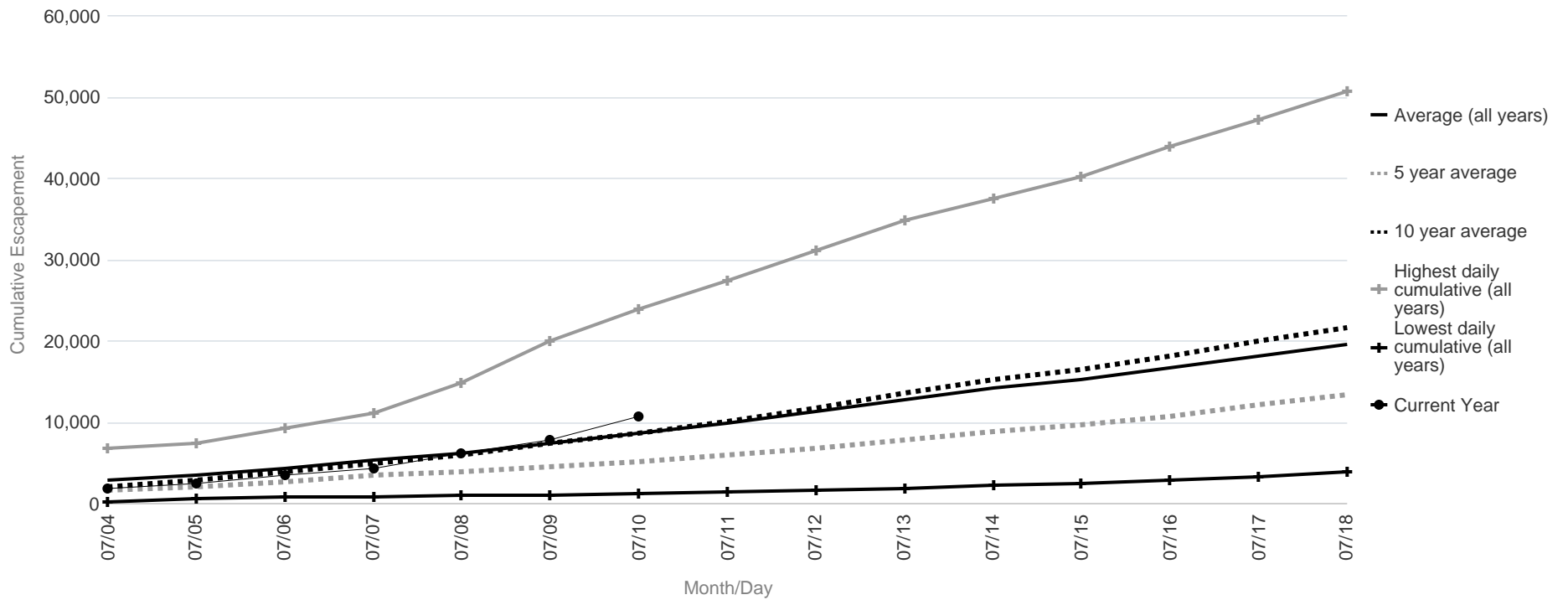


Tatlawiksuk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

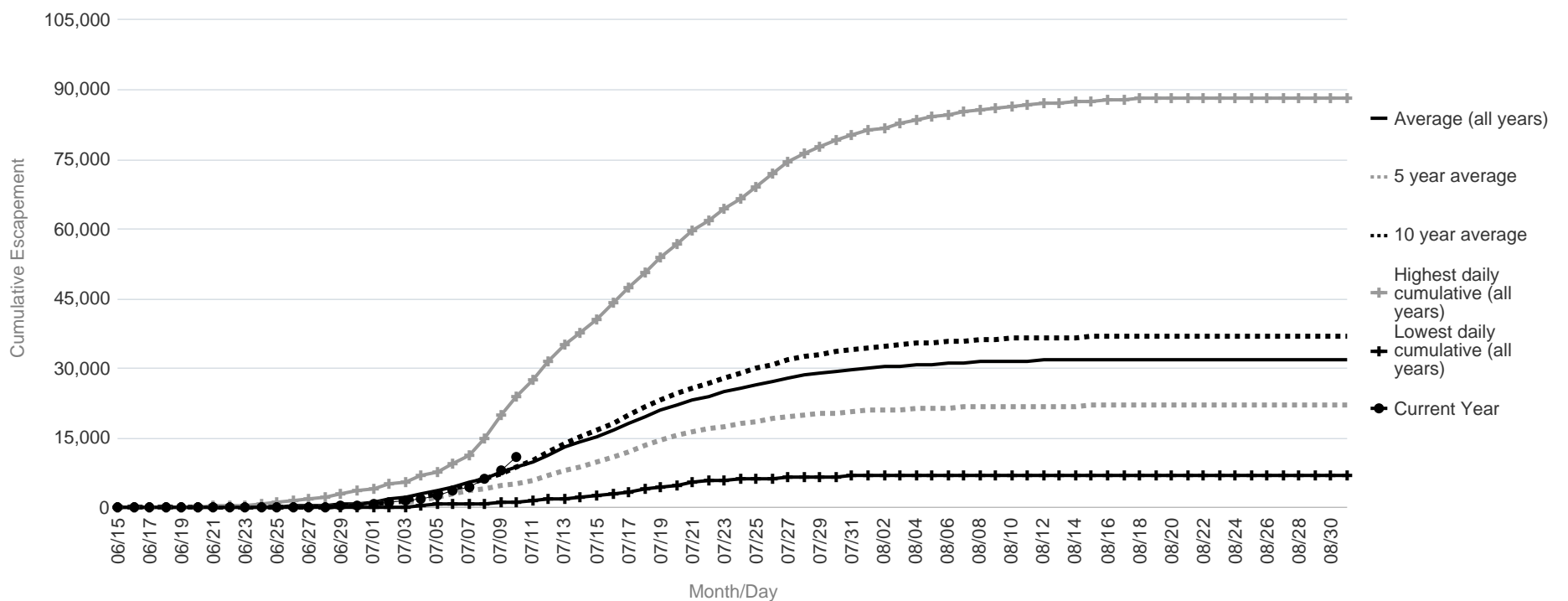
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	276	2,922	1,679	2,167	6,851	1,850
07/05	742	3,620	2,196	2,928	7,534	2,552
07/06	841	4,465	2,815	3,863	9,296	3,644
07/07	890	5,372	3,545	4,968	11,183	4,429
07/08	964	6,294	4,036	6,042	14,915	6,300
07/09	1,071	7,546	4,579	7,430	19,984	7,935
07/10	1,195	8,733	5,202	8,764	24,018	10,739
07/11	1,402	9,923	5,969	10,114	27,384	
07/12	1,707	11,413	6,920	11,876	31,300	
07/13	1,917	12,898	7,939	13,707	34,932	
07/14	2,246	14,177	8,832	15,205	37,592	
07/15	2,607	15,352	9,718	16,513	40,347	
07/16	2,966	16,810	10,751	18,235	44,078	
07/17	3,401	18,232	12,140	19,957	47,310	
07/18	3,882	19,629	13,548	21,639	50,746	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	7,076	32,034	22,043	36,974	88,202

Focused Two-Week Data View



Season Total Overview

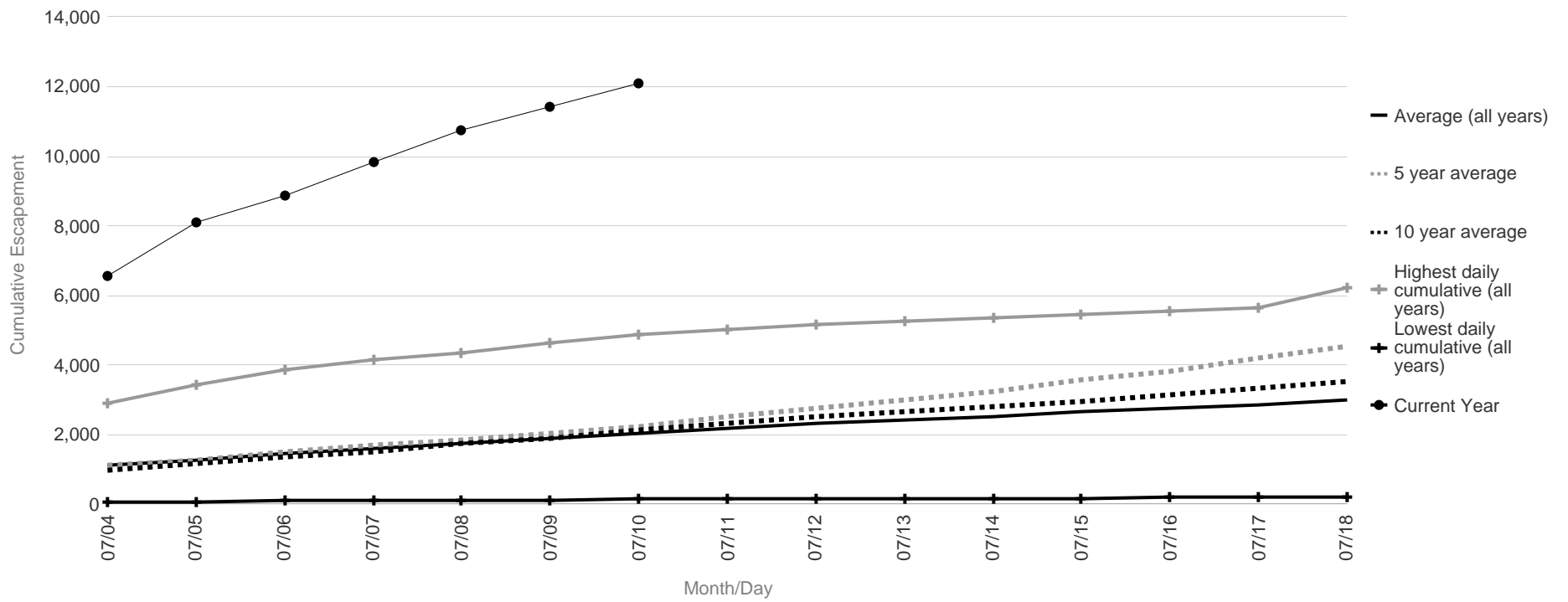


Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

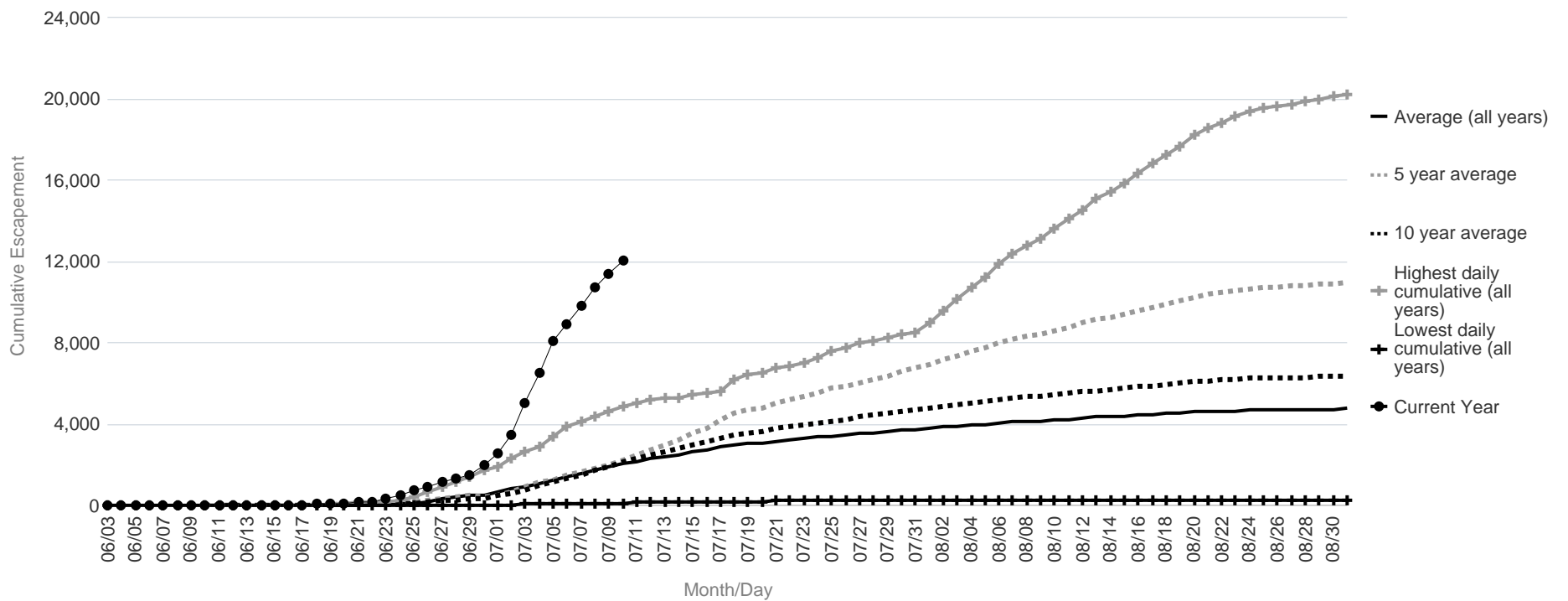
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	70	1,108	1,132	975	2,913	6,573
07/05	77	1,275	1,266	1,168	3,424	8,092
07/06	99	1,447	1,502	1,357	3,867	8,889
07/07	109	1,584	1,686	1,522	4,145	9,809
07/08	113	1,741	1,829	1,739	4,356	10,730
07/09	115	1,886	2,022	1,910	4,651	11,437
07/10	134	2,045	2,236	2,124	4,879	12,098
07/11	145	2,196	2,529	2,342	5,027	
07/12	154	2,329	2,736	2,528	5,176	
07/13	157	2,433	2,985	2,672	5,267	
07/14	163	2,527	3,245	2,803	5,337	
07/15	170	2,636	3,582	2,969	5,433	
07/16	182	2,740	3,836	3,128	5,542	
07/17	204	2,872	4,213	3,340	5,629	
07/18	208	2,982	4,555	3,505	6,240	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	272	4,793	11,090	6,415	20,495

Focused Two-Week Data View



Season Total Overview

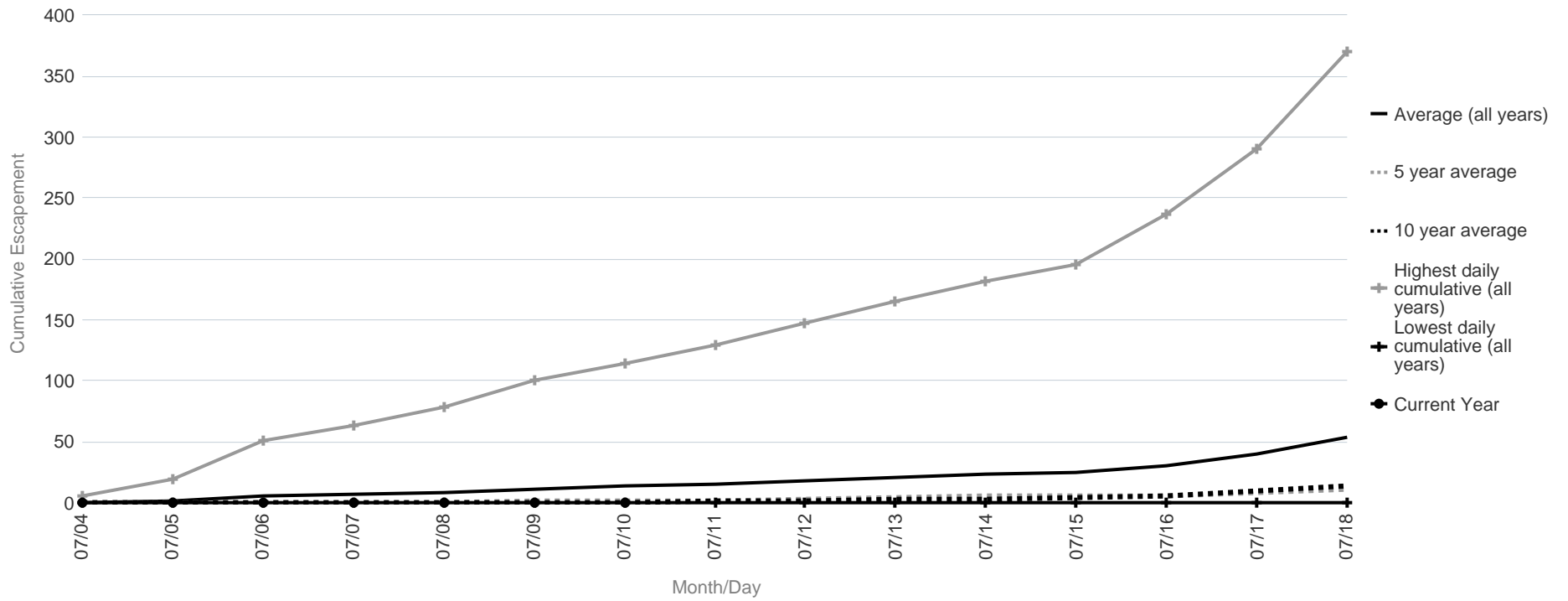


Salmon River (Aniak) Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

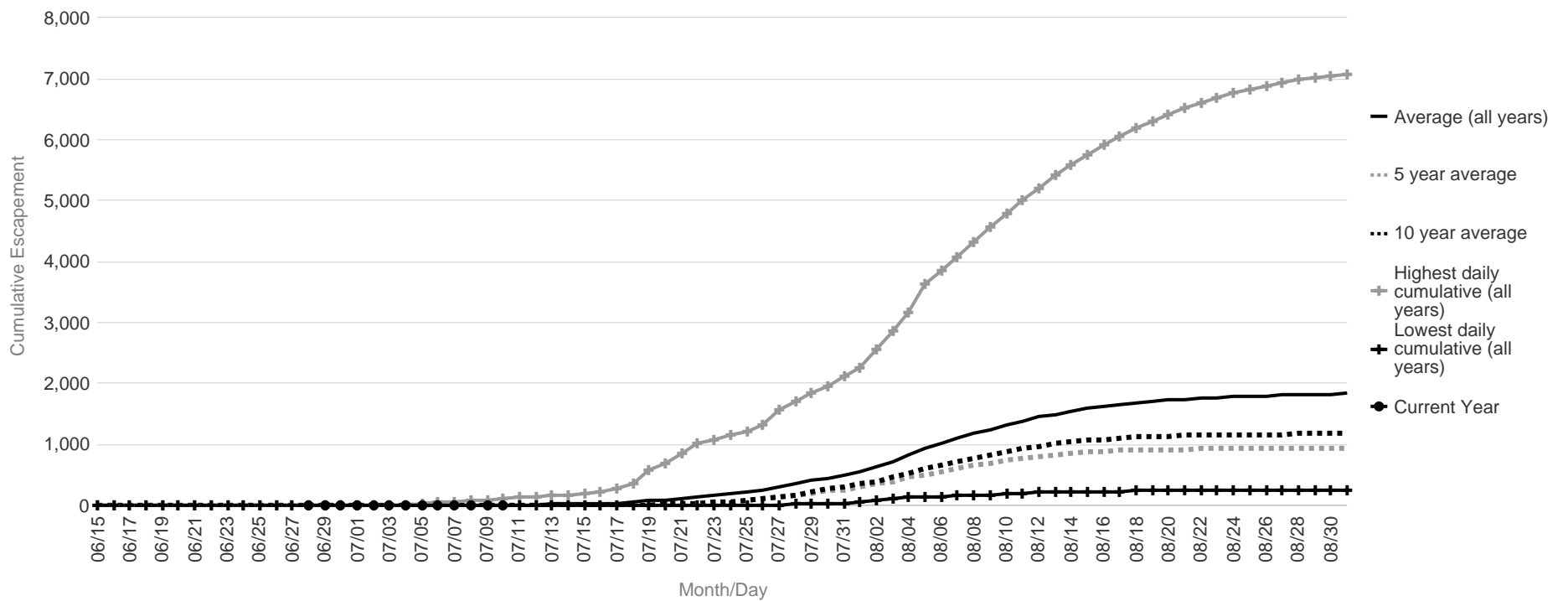
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	0	1	0	0	6	0
07/05	0	2	0	0	19	0
07/06	0	6	0	0	51	0
07/07	0	7	0	0	63	0
07/08	0	9	0	0	79	0
07/09	0	12	1	1	100	0
07/10	0	13	1	1	114	0
07/11	0	15	2	1	130	
07/12	0	18	3	2	148	
07/13	0	21	4	3	166	
07/14	0	23	5	4	182	
07/15	0	25	6	4	196	
07/16	0	31	6	5	237	
07/17	0	41	8	10	291	
07/18	0	53	11	14	371	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	253	1,836	941	1,180	7,086

Focused Two-Week Data View



Season Total Overview



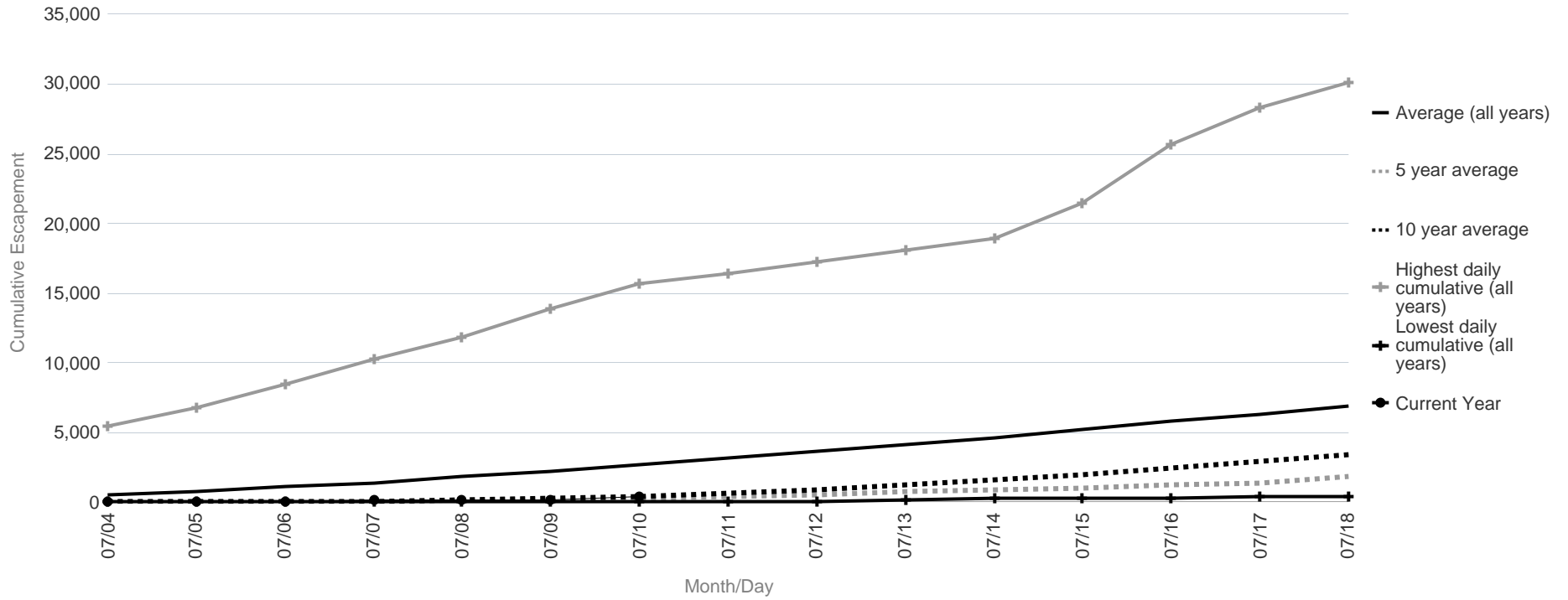
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

Escapement Goal Range: 4,400 to 17,000

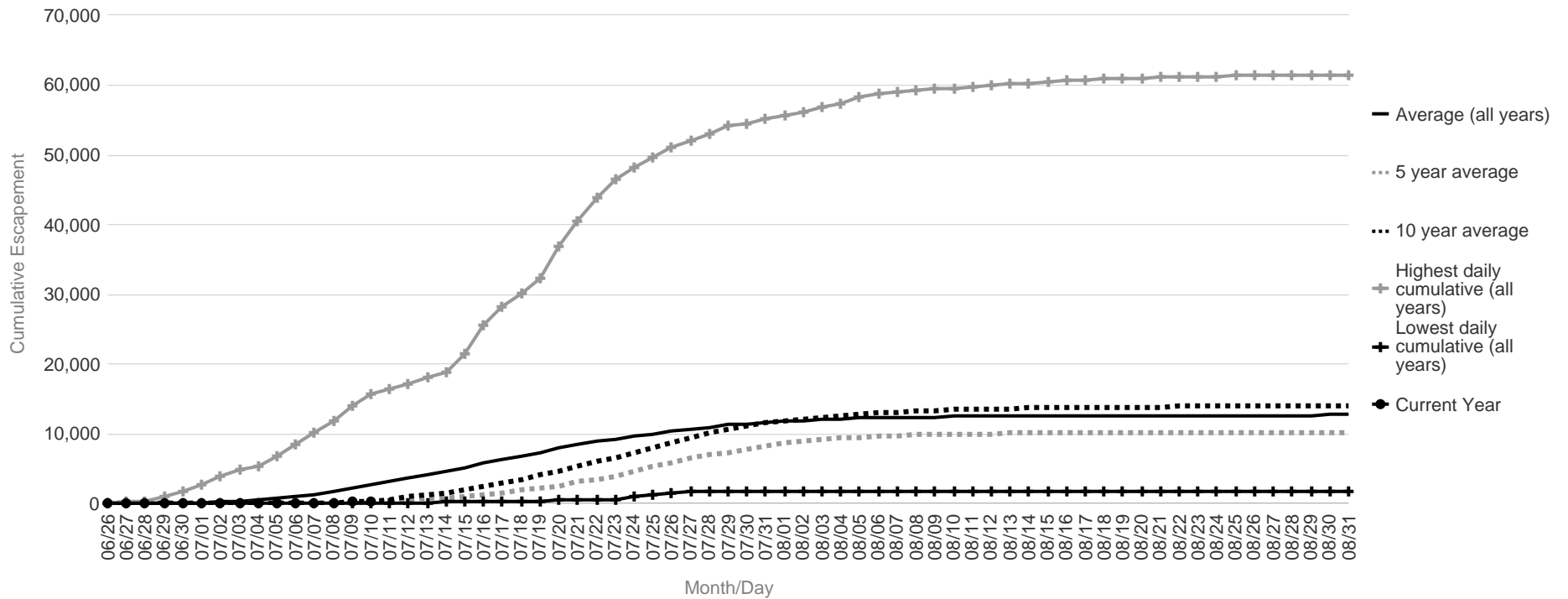
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	0	536	12	13	5,427	40
07/05	0	750	25	27	6,736	62
07/06	0	1,049	30	37	8,498	80
07/07	1	1,364	53	64	10,227	98
07/08	2	1,768	82	124	11,866	143
07/09	3	2,221	129	211	13,891	162
07/10	20	2,704	220	360	15,641	379
07/11	37	3,147	355	619	16,389	
07/12	66	3,634	519	915	17,219	
07/13	118	4,098	713	1,232	18,040	
07/14	203	4,625	866	1,546	18,884	
07/15	295	5,150	996	1,896	21,504	
07/16	301	5,759	1,168	2,368	25,641	
07/17	329	6,333	1,368	2,882	28,331	
07/18	337	6,833	1,857	3,414	30,165	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,732	12,687	10,179	13,949	61,382

Focused Two-Week Data View



Season Total Overview

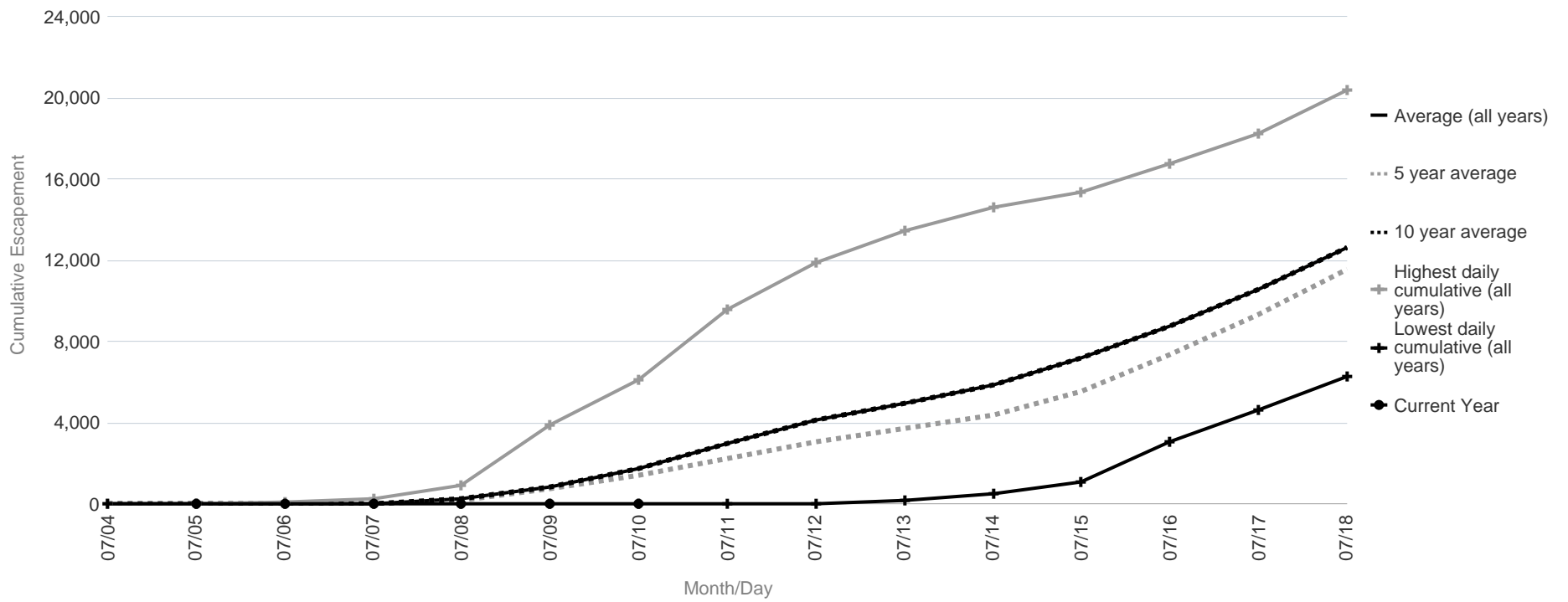


Telaquana River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
07/04	0	0	0	0	0	
07/05	0	0	0	0	0	0
07/06	0	9	0	9	59	0
07/07	0	44	1	44	302	0
07/08	0	225	189	225	928	0
07/09	0	840	792	840	3,921	0
07/10	0	1,717	1,435	1,717	6,135	0
07/11	0	2,963	2,283	2,963	9,584	
07/12	3	4,139	3,083	4,139	11,918	
07/13	162	4,938	3,707	4,938	13,466	
07/14	482	5,894	4,410	5,894	14,612	
07/15	1,072	7,174	5,567	7,174	15,403	
07/16	3,054	8,795	7,382	8,795	16,784	
07/17	4,636	10,610	9,311	10,610	18,240	
07/18	6,266	12,672	11,545	12,672	20,398	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	23,005	51,515	50,714	51,515	95,516

Focused Two-Week Data View



Season Total Overview

